

C
H26u2d
1914/15

OFFICIAL REGISTER OF HARVARD UNIVERSITY

VOLUME XI DECEMBER 30, 1914 NO. IV, PART 5

THE DENTAL SCHOOL

BOSTON, MASS.

1914-15

WITH AN ANNOUNCEMENT FOR 1915-16

UNIVERSITY OF ILLINOIS LIBRARY



PUBLISHED BY HARVARD UNIVERSITY
CAMBRIDGE, MASS.

UNIVERSITY OF ILLINOIS

SEP 7 1915

PRESIDENT'S OFFICE

ANNOUNCEMENT
OF THE
DENTAL SCHOOL
OF
HARVARD UNIVERSITY

1914-15



CAMBRIDGE
PUBLISHED BY THE UNIVERSITY
1915

1914							1915													
JULY							JANUARY							JULY						
Su	Mo	Tu	W	Th	Fr	Sa	Su	Mo	Tu	W	Th	Fr	Sa	Su	Mo	Tu	W	Th	Fr	Sa
..	..	..	1	2	3	4	..	..	..	..	..	1	2	..	..	..	..	1	2	3
5	6	7	8	9	10	11	3	4	5	6	7	8	9	4	5	6	7	8	9	10
12	13	14	15	16	17	18	10	11	12	13	14	15	16	11	12	13	14	15	16	17
19	20	21	22	23	24	25	17	18	19	20	21	22	23	18	19	20	21	22	23	24
26	27	28	29	30	31	..	24	25	26	27	28	29	30	25	26	27	28	29	30	31
..	..	..	..	..	..	..	31	..	..	..	..	..	..	..	..	..	..	..	..	..
AUGUST							FEBRUARY							AUGUST						
..	..	..	..	..	..	1	..	1	2	3	4	5	6	1	2	3	4	5	6	7
2	3	4	5	6	7	8	7	8	9	10	11	12	13	8	9	10	11	12	13	14
9	10	11	12	13	14	15	14	15	16	17	18	19	20	15	16	17	18	19	20	21
16	17	18	19	20	21	22	21	22	23	24	25	26	27	22	23	24	25	26	27	28
23	24	25	26	27	28	29	28	..	..	..	..	..	..	29	30	31	..	..	..	..
30	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
SEPTEMBER							MARCH							SEPTEMBER						
..	..	1	2	3	4	5	..	1	2	3	4	5	6	..	..	..	1	2	3	4
6	7	8	9	10	11	12	7	8	9	10	11	12	13	5	6	7	8	9	10	11
13	14	15	16	17	18	19	14	15	16	17	18	19	20	12	13	14	15	16	17	18
20	21	22	23	24	25	26	21	22	23	24	25	26	27	19	20	21	22	23	24	25
27	28	29	30	..	..	..	28	29	30	31	..	..	..	26	27	28	29	30	..	..
..
OCTOBER							APRIL							OCTOBER						
..	..	..	..	1	2	3	..	..	..	..	1	2	3	..	..	..	..	..	1	2
4	5	6	7	8	9	10	4	5	6	7	8	9	10	3	4	5	6	7	8	9
11	12	13	14	15	16	17	11	12	13	14	15	16	17	10	11	12	13	14	15	16
18	19	20	21	22	23	24	18	19	20	21	22	23	24	17	18	19	20	21	22	23
25	26	27	28	29	30	31	25	26	27	28	29	30	..	24	25	26	27	28	29	30
..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	..	..	..	..	..	..
NOVEMBER							MAY							NOVEMBER						
1	2	3	4	5	6	7	..	..	..	..	..	..	1	..	1	2	3	4	5	6
8	9	10	11	12	13	14	2	3	4	5	6	7	8	7	8	9	10	11	12	13
15	16	17	18	19	20	21	9	10	11	12	13	14	15	14	15	16	17	18	19	20
22	23	24	25	26	27	28	16	17	18	19	20	21	22	21	22	23	24	25	26	27
29	30	..	..	..	..	..	23	24	25	26	27	28	29	28	29	30	..	..	..	..
..	..	..	..	..	..	..	30	31	..	..	..	..	..	..	..	..	..	..	..	..
DECEMBER							JUNE							DECEMBER						
..	..	1	2	3	4	5	..	..	1	2	3	4	5	..	..	..	1	2	3	4
6	7	8	9	10	11	12	6	7	8	9	10	11	12	5	6	7	8	9	10	11
13	14	15	16	17	18	19	13	14	15	16	17	18	19	12	13	14	15	16	17	18
20	21	22	23	24	25	26	20	21	22	23	24	25	26	19	20	21	22	23	24	25
27	28	29	30	31	..	..	27	28	29	30	..	..	..	26	27	28	29	30	31	..
..

CONTENTS

	PAGE
CALENDAR	2
DENTAL SCHOOL CALENDAR	5
DEPARTMENTS OF THE UNIVERSITY	7
ADMINISTRATIVE OFFICERS	8
THE FACULTY OF ARTS AND SCIENCES	8
LABORATORIES AND MUSEUMS ASSOCIATED WITH FACULTY OF ARTS AND SCIENCES	9
OTHER FACULTIES AND DEPARTMENTS	10
FACULTY OF MEDICINE	12
STANDING COMMITTEES	15
GENERAL STATEMENT	16
DENTAL BUILDING	17
ADMINISTRATIVE BOARD OF THE DENTAL SCHOOL	17
INSTRUCTORS, LECTURERS, AND ASSISTANTS	17
ADMISSION OF STUDENTS	22
DENTAL FACULTIES ASSOCIATION	22
GENERAL REGULATIONS	23
REQUIREMENTS FOR ADMISSION	24
TIMES AND PLACES OF EXAMINATIONS FOR ADMISSION	24
ORDER OF EXAMINATIONS (JUNE AND SEPTEMBER)	25
STUDIES IN WHICH EXAMINATIONS ARE HELD	25
COLLEGE ENTRANCE EXAMINATION BOARD	38
REGISTRATION	39
ARRANGEMENT OF STUDIES	39
METHODS OF INSTRUCTION	40
DENTAL AND PHYSIOLOGICAL CHEMISTRY	40
ANATOMY	41
PATHOLOGY	45
PHYSIOLOGY	45
COMPARATIVE PHYSIOLOGY	47
BACTERIOLOGY	47
OPERATIVE DENTISTRY	48
PROPHYLAXIS	50
X-RAY DEPARTMENT	50
EXTRACTION AND ANAESTHESIA	51
PROSTHETIC DENTISTRY	52

	PAGE
CROWN AND BRIDGE WORK	53
ORTHODONTIA	53
PORCELAIN WORK	54
SYPHILIS	54
SURGERY, SURGICAL PATHOLOGY, AND ORAL SURGERY	55
OPERATIVE SURGERY	55
ORAL HYGIENE	55
DENTAL PATHOLOGY	56
MATERIA MEDICA AND THERAPEUTICS	56
NEUROLOGY	57
CLINICAL ADVANTAGES	57
DENTAL STATISTICS	57
LIBRARIES AND MUSEUMS	60
FELLOWSHIPS AND SCHOLARSHIPS	61
HARRIET N. LOWELL SOCIETY FOR DENTAL RESEARCH	63
WARREN MUSEUM	64
EXAMINATIONS	64
STATE BOARD EXAMINATION	65
DIVISION OF STUDENTS	65
REQUIREMENTS FOR THE DEGREE	66
INSTRUMENTS	66
FEES AND EXPENSES	67
STILLMAN INFIRMARY FEE	68
PAYMENT OF FEES	68
TABULAR VIEW	70
STUDENTS IN THE DENTAL SCHOOL	78
LIST OF GRADUATES	84
ANNOUNCEMENT FOR 1915-16	88

DENTAL SCHOOL CALENDAR

1914.

- Sept. 21, Monday.* Examinations begin for applicants for advanced standing, and for men previously conditioned.
- Sept. 28, Monday.* **Academic Year begins.** Registration of Students. Payment of the first instalment of the tuition-fee is required on or before this date.
- Oct. 12, Monday.* Columbus Day : a holiday.
- Nov. 26, Thursday.* Thanksgiving Day : a holiday.

RECESS FROM DEC. 23, 1914, TO JAN. 2, 1915, INCLUSIVE.

1915.

- Jan. 15, Friday.* Last day for receiving applications from students in the Professional Schools to be qualified for the degree of A.M. in 1915.
- Jan. 27, Wednesday.* Mid-year examinations begin.
- Jan. 30, Saturday.* Payment of the second instalment of the tuition-fee is required on or before this date.
- Feb. 1, Monday.* **Second half-year begins.**
- Feb. 22, Monday.* Washington's Birthday : a holiday.

RECESS FROM APRIL 18 TO APRIL 24, INCLUSIVE.

- May 1, Saturday.* Last day for receiving applications of candidates for the degree of D.M.D. in June, 1915.
- May 31, Monday.* Memorial Day : a holiday.
- June 1, Tuesday.* Examinations begin.
- June 14-19, Mon. to Sat.* Examinations for admission.
- June 21, Monday.* Alumni Day.
- June 24, Thursday.* **Commencement.**

SUMMER VACATION, FROM COMMENCEMENT DAY TO
SEPTEMBER 27, INCLUSIVE

Sept. 15-21, Wed. to Tu. Examinations for admission.


Sept. 20, Monday. Examinations begin for applicants for advanced standing, and for men previously conditioned.

Sept. 27, Monday. **Academic Year begins.** Registration of Students. Payment of the first instalment of the tuition-fee is required on this date.

DEPARTMENTS OF THE UNIVERSITY

The University comprehends the following departments : —

HARVARD COLLEGE,
GRADUATE SCHOOL OF ARTS AND SCIENCES,
GRADUATE SCHOOLS OF APPLIED SCIENCE,
SCHOOL OF ENGINEERING,
MINING SCHOOL,
SCHOOL OF ARCHITECTURE,
SCHOOL OF LANDSCAPE ARCHITECTURE,
SCHOOL OF FORESTRY,
SCHOOL OF APPLIED BIOLOGY,
GRADUATE SCHOOL OF BUSINESS ADMINISTRATION,
DIVINITY SCHOOL,
LAW SCHOOL,
MEDICAL SCHOOL,
DENTAL SCHOOL,
GRADUATE SCHOOL OF MEDICINE,
ARNOLD ARBORETUM,
UNIVERSITY LIBRARY,
MUSEUM OF COMPARATIVE ZOÖLOGY,
PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY AND
ETHNOLOGY,
UNIVERSITY MUSEUM,
BOTANIC GARDEN,
GRAY HERBARIUM,
ASTRONOMICAL OBSERVATORY.

 Students in regular standing in any one department of the University are admitted free to the instruction and the examinations given in any other department, with the exception of exercises carried on in the special laboratories. But no student whose tuition fee for the year amounts to less than \$150 is admitted to exercises given in any department other than that in which he is enrolled, except upon payment of suitable fees therefor, and with the knowledge and consent of the Deans both of his department and of the department in which the additional instruction is given.

ADMINISTRATIVE OFFICERS

THE UNIVERSITY

President: ABBOTT LAWRENCE LOWELL, A.B., LL.B., LL.D., PH.D.
Office, 5 University Hall, Cambridge.

Treasurer: CHARLES FRANCIS ADAMS, 2d, A.B., LL.B.

Deputy Treasurer: GORHAM BROOKS, A.B.

The office of the Corporation (and of the Treasurer) is at 50 State Street, Boston. Office hours, 9 A.M. to 5 P.M.; Saturday, 9 A.M. to 1 P.M.

Secretaries to the Corporation: { FRANCIS WELLES HUNNEWELL, 2d, A.B., LL.B.
ROGER PIERCE, A.B.
Office, 5 University Hall, Cambridge.

Comptroller: FRANCIS WELLES HUNNEWELL, 2d, A.B., LL.B.
Office, 5 University Hall, Cambridge.

Assistant Comptroller: JOHN LEWIS TAYLOR.

Office, Dane Hall, Cambridge. Office hours, 9 A.M. to 1 P.M.

Bursar: CHARLES FRANK MASON, A.B.

Office, Dane Hall, Cambridge. Office hours, 9 A.M. to 1 P.M.

Inspector of Grounds and Buildings: WALTER SAFFORD BURKE.

Office, Massachusetts Hall. Office hours, daily, 8.45 A.M. to 12 M., and 4.30 to 4.45 P.M.

Regent: EDWARD DESHON BRANDEGEE, A.B.

Office, 31 Weld Hall, Cambridge. Office hours, daily, except Saturday, 10 A.M. to 1 P.M.

THE FACULTY OF ARTS AND SCIENCES

The Offices of this Faculty and of the Departments under its charge at Nos. 4, 10, 19, 20, 23 and 24, University Hall, Cambridge, are open on week-days, except Saturdays, from 9 A.M. to 1 P.M., and on Saturdays from 9 A.M. to 12 M. Nos. 10, 19, 20, 23, and 24 are also ordinarily open on week-days, except Saturdays, from 2 to 4 P.M.

Dean of the Faculty of Arts and Sciences: LE BARON RUSSELL BRIGGS,
A.M., LL.D., LITT.D.

Office, 10 University Hall. Office hours, Monday, 10 A.M. to 1 P.M.

Dean of the Graduate School of Arts and Sciences: CHARLES HOMER HASKINS, PH.D., LITT.D.

Office, 23 University Hall. Office hours, daily, except Saturday, 12 M. to 1.15 P.M.

Dean of Harvard College: BYRON SATTERLEE HURLBUT, A.M.

Office, 4 University Hall. Office hours, Monday, Tuesday, Friday,
10 A.M. to 12.30 P.M.

Assistant Dean of Harvard College: HENRY AARON YEOMANS, A.M., LL.B.

Office, 15 University Hall. Office hours, Tuesday, Wednesday, Thurs-
day, 9 A.M. to 12 M.

*Secretary of the Faculty of Arts and Sciences and Chairman of the Com-
mittee on Admission:* JOHN GODDARD HART, A.M.

Office, 20 University Hall. Office hours, daily, 9 A.M. to 1 P.M.

Recorder of the Faculty of Arts and Sciences: GEORGE WASHINGTON
CRAM, A.B.

Office, 4 University Hall. Office hours, daily, 9 A.M. to 1 P.M.

*Dean in Charge of University Extension and the Summer School of Arts
and Sciences:* JAMES HARDY ROPES, A.B., D.D.

Assistant Dean of the Summer School of Arts and Sciences: KENNETH
GRANT TREMAYNE WEBSTER, PH.D.

Office, 19 University Hall.

Secretary of the Graduate School of Arts and Sciences: GEORGE WASH-
INGTON ROBINSON, A.B.

Office, 24 University Hall. Office hours, daily, 10 A.M. to 12 M.,
and daily, except Saturday, 2 to 4 P.M.

Secretary for Student Employment: MORRIS GRAY, JR., A.B.

Office, 9 University Hall. Office hours, daily, 10 A.M. to 12 M., and
daily, except Saturday, 2.30 to 4 P.M.

LABORATORIES AND MUSEUMS ASSOCIATED WITH THE FACULTY OF ARTS AND SCIENCES

Director of the Chemical Laboratory: ARTHUR BECKET LAMB, PH.D.

The Chemical Laboratory is in Boylston Hall.

Director of the Wolcott Gibbs Memorial Laboratory: THEODORE WILLIAM
RICHARDS, PH.D., S.D., LL.D., CHEM.D., M.D.

The Wolcott Gibbs Memorial Laboratory is on Frisbie Place.

Director of the Jefferson Physical Laboratory: THEODORE LYMAN, PH.D.

The Jefferson Physical Laboratory is on Holmes Field.

Director of the Museum of Comparative Zoölogy: SAMUEL HENSHAW, A.M.

Honorary Curator of the Botanical Museum: GEORGE LINCOLN GOOD-
ALE, M.D., LL.D.

Curator of the Mineralogical Museum: JOHN ELIOT WOLFF, PH.D.

*Honorary Director of the Peabody Museum of American Archaeology and
Ethnology:* FREDERIC WARD PUTNAM, A.M., S.D.

*Assistant Director of the Peabody Museum of American Archaeology and
Ethnology:* CHARLES CLARK WILLOUGHBY.

Assistant Secretary of the Peabody Museum of American Archaeology and Ethnology: RICHARD FRANCIS CARROLL.

The above Museums are between Oxford Street and Divinity Avenue.

Curator of the Semitic Museum: DAVID GORDON LYON, PH.D., D.D.

The Semitic Museum is on Divinity Avenue.

Curator of the Germanic Museum: KUNO FRANCKE, PH.D., LL.D., LITT. D.

The Germanic Museum is at the junction of Cambridge Street and Broadway, opposite Memorial Hall.

Director of the William Hayes Fogg Museum of Art and Curator of the Gray Collection of Engravings: EDWARD WALDO FORBES, A.B.

The Fogg Museum of Art is on Cambridge Street.

Director of the Botanic Garden: OAKES AMES, A.M.

Curator of the Gray Herbarium: BENJAMIN LINCOLN ROBINSON, PH.D.

The Herbarium and Botanic Garden are at the corner of Garden and Linnaean Streets.

OTHER FACULTIES AND DEPARTMENTS

Dean of the Graduate School of Business Administration: EDWIN FRANCIS GAY, PH.D.

Office, 17 University Hall. Office hours, Monday, Wednesday, and Friday, 11 A.M. to 12.30 P.M.

Secretary of the Graduate School of Business Administration: ELIOT GRINNELL MEARS, A.B., M.B.A.

Office, 17 University Hall. Office hours, Tuesday, Thursday, and Saturday, 10 A.M. to 12 M.

Dean of the Faculty of Divinity: WILLIAM WALLACE FENN, A.M., D.D.

Office hours, daily, 12 M.

Secretary of the Faculty of Divinity: HENRY WILDER FOOTE, A.M., S.T.B.

Office, Divinity Library, Cambridge. Office hours, Tuesday and Thursday, 9 to 11 A.M.; Wednesday, 2.30 to 4.30 P.M.; other times by appointment.

Dean of the Faculty of Law: EZRA RIPLEY THAYER, A.M., LL.B., LL.D.

Office, Langdell Hall, Cambridge.

Secretary of the Faculty of Law: RICHARD AMES, A.B., LL.B.

Office, Langdell Hall, Cambridge. Office hours, daily, 9 A.M. to 1 P.M.

Librarian of the Law School: EDWARD BRINLEY ADAMS, A.B., LL.B.

Dean of the Faculty of Medicine } EDWARD HICKLING BRADFORD, A.M.,
Dean of the Medical School } M.D.

Office, Harvard Medical School, Longwood Avenue, Boston. Office hours, Friday, 4 to 5 P.M.

Secretary of the Faculty of Medicine: FRANCIS WINSLOW PALFREY, A.B., M.D.

Office, Harvard Medical School, Longwood Avenue, Boston. Office hours, daily, except Saturday, 12 M. to 1 P.M.

Dean of the Graduate School of Medicine: HORACE DAVID ARNOLD,
A.B., M.D.

Office, Harvard Medical School. Office hours, Tuesday, 4 to 5 P.M.

Secretary of the Graduate School of Medicine: WALTER CLARKE HOWE,
A.M., M.D.

Office, Harvard Medical School. Office hours, Monday, Wednesday,
Friday, 9 to 10 A.M.; Tuesday and Thursday, 4 to 5 P.M.

Dean of the Dental School: EUGENE HANES SMITH, D.M.D.

Office, Harvard Dental School, Longwood Avenue, Boston. Office
hours, Wednesday, 4.30 to 5.30 P.M., and by appointment.

Secretary to the Dean and Chief Clerk in the Dean's Office: FLORENCE
M. LANE.

Office, Harvard Dental School, Longwood Avenue, Boston. Office
hours, 2 to 5.30 P.M., daily except Saturdays; Saturdays, 9 A.M.
to 12 M.

Curator of the Dental Museum and Librarian: WALDO ELIAS BOARD-
MAN, D.M.D.

Museum and Library are in the Dental School Building, Longwood
Avenue; Office of the Curator and Librarian, 419 Boylston St.,
Boston.

Director of the Arnold Arboretum: CHARLES SPRAGUE SARGENT, A.B.,
LL.D.

The Arnold Arboretum is in Jamaica Plain. The nearest railway
and telegraph station is Forest Hills, on the Boston and Providence
Division of the N.Y., N.H., and Hartford Railroad.

Director of the Astronomical Observatory: EDWARD CHARLES PICKER-
ING, LL.D., S.D.

The Observatory is at the corner of Garden and Bond Streets,
Cambridge.

THE DENTAL SCHOOL

FACULTY OF MEDICINE *

MEDICAL SCHOOL

ADDRESS.†

ABBOTT LAWRENCE LOWELL, LL.B., LL.D., Ph.D., PRESIDENT,	17 Quincy St., Cambridge.
EDWARD H. BRADFORD, M.D., DEAN,	133 Newbury St.
ABNER POST, M.D., <i>Professor of Syphilis,</i>	16 Newbury St.
WILLIAM F. WHITNEY, M.D., <i>John Barnard Swett Jackson Curator of the Warren Anatomical Museum,</i>	Harvard Medical School.
CHARLES M. GREEN, M.D., <i>Professor of Obstetrics and Gynaecology,</i>	78 Marlborough St.
WILLIAM T. COUNCILMAN, M.D., A.M., LL.D., <i>Shattuck Professor of Pathological Anatomy,</i>	78 Bay State Road.
HAROLD C. ERNST, M.D., A.M., <i>Professor of Bacteri- ology,</i>	Harvard Medical School.
GEORGE G. SEARS, M.D., <i>Clinical Professor of Medi- cine,</i>	426 Beacon St.
ALGERNON COOLIDGE, M.D., <i>Professor of Laryn- gology,</i>	613 Beacon St.
ROBERT W. LOVETT, M.D., <i>Professor of Orthopedic Surgery,</i>	234 Marlborough St.
THEOBALD SMITH, M.D., LL.D., S.D., <i>George Fabian Professor of Comparative Pathology,</i>	Harvard Medical School.
WILLIAM T. PORTER, M.D., LL.D., <i>Professor of Comparative Physiology,</i>	Dover.
PAUL THORNDIKE, M.D., <i>Assistant Professor of Genito-Urinary Surgery,</i>	24 Marlborough St.
MILTON J. ROSENAU, M.D., A.M., <i>Professor of Pre- ventive Medicine and Hygiene,</i>	65 Naples Road, Brookline.
FRANK B. MALLORY, M.D., <i>Associate Professor of Pathology,</i>	Harvard Medical School.

* Arranged, with the exception of the President and Dean, on the basis of collegiate seniority.

† The address is Boston, unless otherwise stated.

- EDWARD H. NICHOLS, M.D., *Associate Professor of Surgery*, 294 Marlborough St.
- J. BAPST BLAKE, M.D., *Assistant Professor of Surgery*, 657 Boylston St.
- EUGENE A. CROCKETT, M.D., *Assistant Professor of Otology*, 298 Marlborough St.
- HOWARD A. LOTHROP, M.D., *Assistant Professor of Surgery*, 101 Beacon St.
- JOHN L. MORSE, M.D., *Associate Professor of Pediatrics*, 70 Bay State Road.
- CHARLES A. PORTER, M.D., *Associate Professor of Surgery*, 254 Beacon St.
- EDWARD W. TAYLOR, M.D., *Assistant Professor of Neurology*, 457 Marlborough St.
- RICHARD C. CABOT, M.D., *Assistant Professor of Medicine*, 1 Marlborough St.
- JAMES S. STONE, M.D., *Instructor in Surgery*, 234 Marlborough St.
- DAVID L. EDSALL, M.D., S.D., *Jackson Professor of Clinical Medicine*, 80 Marlborough St.
- ELLIOTT P. JOSLIN, M.D., A.M., *Assistant Professor of Medicine*, 81 Bay State Road.
- C. MORTON SMITH, M.D., *Instructor in Syphilis*, 437 Marlborough St.
- CHARLES J. WHITE, M.D., *Assistant Professor of Dermatology*, 259 Marlborough St.
- JAMES H. WRIGHT, M.D., S.D., *Assistant Professor of Pathology*, Mass. General Hospital.
- HARVEY CUSHING, M.D., F.R.C.S., *Moseley Professor of Surgery*, 305 Walnut St., Brookline.
- WILLIAM P. GRAVES, M.D., *Professor of Gynecology*, 244 Marlborough St.
- REID HUNT, M.D., *Professor of Pharmacology*, Harvard Medical School.
- OTTO FOLIN, PH.D., *Hamilton Kuhn Professor of Biological Chemistry*, Harvard Medical School.
- ROBERT B. GREENOUGH, M.D., *Assistant Professor of Surgery*, 10 Gloucester St.
- HARRIS P. MOSHER, M.D., *Assistant Professor of Laryngology*, 828 Beacon St.
- FRANKLIN S. NEWELL, M.D., *Assistant Professor of Obstetrics and Gynaecology*, 443 Beacon St.
- WILLIAM H. SMITH, M.D., *Instructor in Medicine*, 10 Gloucester St.

- RICHARD P. STRONG, M.D., S.D., *Professor of Tropical Medicine*,
Harvard Medical School.
- HUGH CABOT, M.D., *Assistant Professor of Genito-Urinary Surgery*,
87 Marlborough St.
- HENRY A. CHRISTIAN, M.D., *Hersey Professor of the Theory and Practice of Physic*,
252 Marlborough St.
- JOHN L. BREMER, M.D., *Assistant Professor of Histology*,
295 Marlborough St.
- WALTER B. CANNON, M.D., *George Higginson Professor of Physiology*,
Harvard Medical School.
- JOHN WARREN, M.D., *Assistant Professor of Anatomy*,
Harvard Medical School.
- HERMAN M. ADLER, M.D., *Assistant Professor of Psychiatry*,
74 Fenwood Road.
- DAVID CHEEVER, M.D., *Assistant Professor of Surgical Anatomy*,
20 Hereford St.
- FREDERIC T. LEWIS, M.D., *Assistant Professor of Embryology*,
Harvard Medical School.
- ERNEST G. MARTIN, PH.D., *Assistant Professor of Physiology*,
Harvard Medical School.
- ELMER E. SOUTHARD, M.D., A.M., *Bullard Professor of Neuropathology*,
70 Francis Ave., Cambridge.
- PERCY G. STILES, PH.D., *Instructor in Physiology*,
19 Proctor St., Newtonville.
- ERNEST E. TYZZER, M.D., *Assistant Professor of Pathology*,
Harvard Medical School.
- LAWRENCE J. HENDERSON, M.D., *Assistant Professor of Biological Chemistry*,
Harvard Medical School.
- S. BURT WOLBACH, M.D., *Associate Professor of Bacteriology*,
Harvard Medical School.
- MARSHAL FABYAN, M.D., *Instructor in Comparative Pathology*,
Harvard Medical School.
- WORTH HALE, M.D., *Assistant Professor of Pharmacology*,
379 Commonwealth Ave.
- THOMAS ORDWAY, M.D., *Instructor in Medicine*,
73 Anawan Ave., W. Roxbury.
- EDWIN H. PLACE, M.D., *Assistant Professor of Pediatrics*,
745 Massachusetts Ave.
- WALTER R. BLOOR, PH.D., *Assistant Professor of Biological Chemistry*,
Harvard Medical School.
- CHANNING FROTHINGHAM, JR., M.D., *Instructor in Medicine*,
395 Marlborough St.
- ALEXANDER S. BEGG, M.D., *Instructor in Comparative Anatomy*,
Harvard Medical School.

ALEXANDER FORBES, M.D., *Instructor in Physiology*, Milton.
 FRANCIS W. PALFREY, M.D., *Secretary of the Faculty of Medicine, and Assistant in Medicine*, 80 Marlborough St.

DENTAL SCHOOL

EUGENE H. SMITH, D.M.D., *Professor of Clinical Dentistry and Orthodontia, and Dean of the Dental School*, 283 Dartmouth St.
 CHARLES A. BRACKETT, D.M.D., *Professor of Dental Pathology*, Newport, R.I.
 EDWARD C. BRIGGS, M.D., D.M.D., *Professor of Dental Materia Medica and Therapeutics*, 129 Marlborough St
 GEORGE HOWARD MONKS, M.D., M.R.C.S., *Professor of Oral Surgery*, 67 Marlborough St.
 WILLIAM P. COOKE, D.M.D., *Professor of Prosthetic Dentistry*, 520 Beacon St.
 WILLIAM H. POTTER, D.M.D., *Professor of Operative Dentistry*, 16 Arlington St.

GRADUATE SCHOOL OF MEDICINE

HORACE D. ARNOLD, M.D., *Dean of the Graduate School of Medicine*, 520 Commonwealth Ave.

STANDING COMMITTEES FOR THE DENTAL SCHOOL

Building.—Dr. Cooke (*Chairman*), Dr. E. H. Smith.

Courses of Study.—Dr. Smith (*Chairman*), Drs. Potter, Cooke, and Briggs.

Students' Aid.—Any student who needs assistance, pecuniary or other, may consult Dr. Franklin Dexter, Director of Scholarships. Appointments may be made by calling at the Harvard Medical School, Building D 386, Mondays, from 2 to 3.15 P.M.

THE DENTAL SCHOOL

BOSTON

GENERAL STATEMENT

The Harvard Dental School is established in Boston and was instituted by vote of the President and Fellows of Harvard College, July 17, 1867. The first session of the School opened on the first Wednesday in November, 1867, and continued until the following March. The first examination of candidates for the degree of the School was held March 6, 1869.

The academic year begins on the Monday preceding the last Wednesday in September, and ends on the Thursday preceding the last Wednesday in June. There is a recess from December 23 to January 2, inclusive; and a recess of one week's duration in April.

Instruction in this School is given throughout the academic year, by lectures, recitations, clinical teaching, and practical exercises, uniformly distributed. The course of instruction is progressive, and extends over three years, the teaching of one year not being repeated in the next.

The Medical subjects are pursued in the Harvard Medical School, the student receiving instruction in anatomy, bacteriology, histology, physiology, physiological and dental chemistry, and general pathology.

It is the object of the Faculty to present a complete course of instruction in the theory and practice of Dentistry; and for this purpose a well-appointed laboratory and infirmary are provided. Clinical instruction is given by the professors and other instructors; and each day patients are assigned to the students, ensuring to all the opportunity of operating at the chair, and becoming trained by actual practice in all the operations demanded of the dentist.

Students have access to the hospitals of the city; to the dissecting-room and museum of the Medical School. Students in regular standing in any one department of the University are admitted free to the instruction and the examinations given in any other department, with the exception of exercises carried on in the special laboratories. But no student whose tuition fee for the year amounts to less than \$150 is admitted to exercises given in any department other than that in which he is enrolled, except by special permission of the Dean of the department in which the instruc-

tion is given, after being duly accredited thereto by the Dean of the department of which the student is a member.

That the time of study shall count as a full term, students of every class must present themselves within the first week of the term and register their names with the Dean.

THE DENTAL BUILDING

In September, 1909, the Dental School moved to its new building, at the corner of Longwood Avenue and Wigglesworth Street. This building has the latest hospital equipment and is used solely for hospital purposes. It contains a commodious infirmary, three operating rooms for oral surgery with connecting wards, prosthetic laboratory, office of administration, library, museum, students' room and reception room.

It is connected by a subway with the Harvard Medical School buildings where all lectures are given.

ADMINISTRATIVE BOARD

EUGENE H. SMITH, D.M.D., DEAN, and *Professor of Clinical Dentistry and Orthodontia.*

CHARLES A. BRACKETT, D.M.D., *Professor of Dental Pathology.*

EDWARD C. BRIGGS, D.M.D., M.D., *Professor of Dental Materia Medica and Therapeutics.*

GEORGE H. MONKS, M.D., M.R.C.S., *Professor of Oral Surgery.*

WILLIAM P. COOKE, D.M.D., *Professor of Prosthetic Dentistry.*

WILLIAM H. POTTER, D.M.D., *Professor of Operative Dentistry.*

AMOS I. HADLEY, D.M.D., *Instructor in Porcelain Work.*

SAMUEL T. ELLIOTT, D.M.D., *Instructor in Operative Dentistry.*

GEORGE H. WRIGHT, D.M.D., *Lecturer on Oral Hygiene.*

LEROY M. S. MINER, D.M.D., M.D., *Assistant Professor of Oral Surgery.*

INSTRUCTORS, LECTURERS, AND ASSISTANTS

TIMOTHY O. LOVELAND, D.M.D., *Instructor in Operative Dentistry.*

ALBERT B. JEWELL, D.M.D., *Instructor in Operative Dentistry.*

FORREST G. EDDY, D.M.D., *Instructor in Operative Dentistry.*

FRANK PERRIN, D.M.D., *Instructor in Operative Dentistry.*

EDWIN C. BLAISDELL, D.M.D., *Instructor in Operative Dentistry.*

NED A. STANLEY, D.M.D., *Instructor in Operative Dentistry.*

JAMES SHEPHERD, D.M.D., *Instructor in Operative Dentistry.*

- THOMAS W. WOOD, D.M.D., *Instructor in Operative Dentistry.*
 BENJAMIN H. CODMAN, D.M.D., *Instructor in Operative Dentistry.*
 ARTHUR W. ELDRED, D.M.D., *Instructor in Prosthetic Dentistry.*
 ARTHUR J. OLDHAM, D.M.D., *Instructor in Porcelain Work.*
 JOHN BAPST BLAKE, M.D., *Instructor in Surgery.*
 FRANK T. TAYLOR, D.M.D., *Instructor in Operative Dentistry.*
 AMOS I. HADLEY, D.M.D., *Instructor in Porcelain Work.*
 JOSEPH T. PAUL, D.M.D., *Instructor in Operative Dentistry.*
 EDWARD W. TAYLOR, M.D., *Instructor in Neurology.*
 H. CARLTON SMITH, PH.G., *Lecturer on Dental Chemistry.*
 FRED M. RICE, A.M., *Instructor in Chemistry.*
 C. MORTON SMITH, M.D., *Instructor in Syphilis.*
 HARRY S. PARSONS, D.M.D., *Instructor in Operative Dentistry.*
 EDWARD M. QUINBY, M.R.C.S., L.R.C.P., D.M.D., *Instructor in Operative Dentistry.*
 THOMAS B. HAYDEN, D.M.D., *Instructor in Prosthetic Dentistry.*
 JAMES A. FURFEY, D.M.D., *Instructor in Operative Dentistry.*
 ASHER H. ST. C. CHASE, D.M.D., *Instructor in Operative Dentistry.*
 EDWIN L. FARRINGTON, D.M.D., *Instructor in Extracting and Anaesthesia.*
 ADELBERT FERNALD, D.M.D., *Instructor in Orthodontia.*
 CHARLES E. PARKHURST, D.M.D., *Instructor in Operative Dentistry.*
 CLARENCE B. VAUGHAN, D.M.D., *Instructor in Operative Dentistry.*
 LAWRENCE W. BAKER, D.M.D., *Assistant Professor of Orthodontia.*
 CHARLES B. BURNHAM, D.M.D., *Assistant in Operative Dentistry.*
 HORACE L. HOWE, D.M.D., *Instructor in Orthodontia.*
 JOHN T. TIMLIN, D.M.D., *Assistant in Operative Dentistry.*
 OLIVER P. WOLFE, D.M.D., *Instructor in Extracting and Anaesthesia.*
 ERNEST E. CARLE, D.M.D., *Instructor in Operative Dentistry.*
 ARTHUR A. LIBBY, D.M.D., *Instructor in Operative Dentistry.*
 NORMAN B. NESBETT, D.M.D., *Instructor in Porcelain Work.*
 EDWARD P. WHITE, D.M.D., *Instructor in Operative Dentistry.*
 DAVID F. SPINNEY, D.M.D., *Instructor in Operative Dentistry.*
 CHARLES A. JAMESON, D.M.D., *Instructor in Operative Dentistry.*
 DENNIS J. HURLEY, D.M.D., *Assistant in Prosthetic Dentistry.*
 ALBERT I. MACKINTOSH, D.M.D., *Instructor in Operative Dentistry.*
 CHARLES W. McPHERSON, D.M.D., *Instructor in Operative Dentistry.*
 LESLIE H. NAYLOR, D.M.D., *Instructor in Operative Dentistry.*

SAMUEL T. ELLIOTT, D.M.D., *Instructor in Operative Dentistry.*
 WALTER A. DAVIS, D.M.D., *Instructor in Operative Dentistry.*
 WILSON C. DORT, D.M.D., *Instructor in Prosthetic Dentistry.*
 RUFUS H. GOULD, D.M.D., *Instructor in Prosthetic Dentistry.*
 ALBERT L. MIDGLEY, D.M.D., *Instructor in Extracting and Anaesthesia.*

WALTER C. MINER, D.M.D., *Instructor in Orthodontia.*
 CHARLES G. PIKE, D.M.D., *Instructor in Operative Dentistry.*
 ARTHUR T. FREEMAN, D.M.D., *Instructor in Operative Dentistry.*
 FRANK R. McCULLAGH, D.M.D., *Instructor in Prosthetic Dentistry.*
 RUDOLF SYKORA, D.M.D., *Instructor in Prosthetic Dentistry.*
 CHARLES T. WARNER, D.M.D., *Instructor in Porcelain Work.*
 MARTIN B. DILL, D.M.D., *Lecturer on Operative Dentistry.*
 HENRY GILMAN, D.M.D., *Instructor in Prosthetic Dentistry.*
 HERBERT F. LANGLEY, D.M.D., *Instructor in Prosthetic Dentistry.*
 HARRY A. STONE, D.M.D., *Instructor in Operative Dentistry.*
 FRANK E. TRAVIS, D.M.D., *Instructor in Prosthetic Dentistry.*
 WILLIAM H. WESTON, D.M.D., *Instructor in Prosthetic Dentistry.*
 GEORGE H. WRIGHT, D.M.D., *Lecturer on Oral Hygiene.*
 RAYMOND B. CARTER, D.M.D., *Assistant in Operative Dentistry.*
 HARRY S. CLARK, D.M.D., *Instructor in Prosthetic Dentistry.*
 FRANK LER. EAMES, D.M.D., *Instructor in Prosthetic Dentistry.*
 NATHAN A. ESTES, D.M.D., *Instructor in Operative Dentistry.*
 JULIUS F. HOVESTADT, D.M.D., *Instructor in Prosthetic Dentistry.*
 LEON J. LAWTON, D.M.D., *Assistant in Operative Dentistry.*
 LEROY M. S. MINER, D.M.D., M.D., *Assistant Professor of Oral Surgery.*

UBERT C. RUSSELL, D.M.D., *Assistant in Prosthetic Dentistry.*
 BENJAMIN TISHLER, D.M.D., *Instructor in Operative Dentistry.*
 EUGENE B. WYMAN, D.M.D., *Instructor in Operative Dentistry.*
 ROBERT S. CATHERON, D.M.D., *Instructor in Operative Dentistry.*
 EARLE C. CUMMINGS, D.M.D., *Instructor in Roentgenology.*
 ALBERT HERDER, D.M.D., *Assistant in Extracting and Anaesthesia.*

VARAZTAD H. KAZANJIAN, D.M.D., *Demonstrator of Prosthetic Dentistry.*

PHILIP A. LEAVITT, D.M.D., *Instructor in Operative Dentistry.*
 BLAINE W. MORGAN, D.M.D., *Instructor in Prosthetic Dentistry.*
 J. WILLIAM O'CONNELL, D.M.D., *Lecturer on Materia Medica and Instructor in Operative Dentistry.*
 WALTER F. PROVAN, D.M.D., *Instructor in Prosthetic Dentistry.*

CHARLES E. STEVENS, D.M.D., *Instructor in Operative Dentistry.*
 HORATIO LEE. ANDREWS, D.M.D., *Instructor in Prosthetic Den-*
tistry.

FRED A. BECKFORD, D.M.D., *Instructor in Prosthetic Dentistry.*
 ARTHUR S. CROWLEY, D.M.D., *Instructor in Operative Dentistry.*
 EDWARD H. LOOMER, D.M.D., *Instructor in Operative Dentistry.*
 HAROLD B. NORWOOD, D.M.D., *Instructor in Extracting and*
Anaesthesia.

MAURICE E. PETERS, D.M.D., *Instructor in Prosthetic Dentistry.*
 JUDSON C. SLACK, D.M.D., *Instructor in Operative Dentistry.*
 WILLIAM F. STRANGMAN, D.M.D., *Instructor in Prosthetic Den-*
tistry.

ERNEST V. L. WHITCHURCH, D.M.D., *Instructor in Operative*
Dentistry.

REINHOLD RUELBERG, D.M.D., *Instructor in Prosthetic Dentistry.*
 ERNEST S. CALDER, D.M.D., *Instructor in Prosthetic Dentistry.*

GUY E. FLAGG, D.M.D., *Instructor in Prosthetic Dentistry.*

SIMON MYERSON, D.M.D., *Assistant in Prosthetic Dentistry.*

JOSEPH A. RING, D.M.D., *Instructor in Extracting and Anaesthesia.*

CARL E. SAFFORD, D.M.D., *Instructor in Operative Dentistry.*

CLARENCE SHANNON, D.M.D., *Instructor in Prosthetic Dentistry.*

ROGER B. TAFT, D.M.D., *Instructor in Oral Surgery.*

MARK TISHLER, D.M.D., *Assistant in Prosthetic Dentistry.*

WILLIAM F. DREA, D.M.D., *Instructor in Operative Dentistry.*

NELS H. MALMSTROM, D.M.D., *Instructor in Prosthetic Dentistry.*

FREDERICK J. SULLIVAN, D.M.D., *Instructor in Prosthetic Den-*
tistry.

CHARLES S. EMERSON, D.M.D., *Instructor in Operative Dentistry.*

GEORGE A. PEASE, D.M.D., *Assistant in Prosthetic Dentistry.*

ST. CLAIR A. WODELL, D.M.D., *Instructor in Prosthetic Dentistry.*

KURT H. THOMA, D.M.D., *Assistant in Anaesthesia.*

LEON A. STORZ, D.M.D., *Assistant in Prosthetic Dentistry.*

ADOLPH GAHM, D.M.D., *Assistant in Prosthetic Dentistry.*

FREDERICK W. HOVESTADT, D.M.D., *Assistant in Prosthetic*
Dentistry.

WILLIAM G. JEWETT, D.M.D., *Assistant in Operative Dentistry.*

LAWRENCE E. MCGOURTY, D.M.D., *Assistant in Operative Den-*
tistry.

HENRY J. SKINNER, D.M.D., *Assistant in Operative Dentistry.*

NISHAN DER S. TASHJIAN, D.M.D., *Assistant in Prosthetic Den-*
tistry.

CHESTER F. WOLFE, D.M.D., *Assistant in Operative Dentistry.*
WILLIAM W. ANTHONY, D.M.D., *Assistant in Operative Dentistry.*
MERTON W. FOSS, D.M.D., *Assistant in Prosthetic Dentistry.*
THOMAS J. GIBLIN, JR., D.M.D., *Assistant in Prosthetic Dentistry.*
RALPH E. GOVE, D.M.D., *Assistant in Prosthetic Dentistry.*
EDWARD M. GUTHRIE, D.M.D., *Assistant in Operative Dentistry.*
ALLAN W. LORD, D.M.D., *Assistant in Prosthetic Dentistry.*
STEPHEN P. MALLET, D.M.D., *Assistant in Anaesthesia.*
CHARLES W. RINGER, D.M.D., *Assistant in Operative Dentistry.*
TULLIO N. BELLO, D.M.D., *Assistant in Operative Dentistry.*
WALTER G. BRIDGE, D.M.D., *Instructor in Prosthetic Dentistry.*

ADMISSION OF STUDENTS

All candidates for admission holding a degree in letters, science, or medicine, from a recognized college or scientific school, or who have passed an examination for admission to Harvard College or any other reputable college of letters, or who have passed the examinations of a four years' course in a reputable high school,* are admitted without examination. All other candidates must pass an examination.

All candidates, whether presenting a degree or not, are required to satisfy the Administrative Board that they have had a course in Theoretical and Descriptive (Inorganic) Chemistry sufficient to fit them to pursue the courses in Chemistry given at the School, or, failing in this, to pass an examination in General Chemistry.

Special arrangements may be made for making up this condition in August and September previous to entering the School.

A certificate of having passed the examination for admission will admit a student to this School only so long as the entrance requirements remain the same.

The entrance and first-year examinations will be allowed to foreign students who have passed *equivalent* examinations abroad, upon presentation of proper certificates from the examining boards, vouching for the facts.

Students who have had a preliminary training equivalent to our requirements for admission and who began their professional studies in other recognized Dental or Medical Schools may be admitted to advanced standing; but all persons who apply for admission to the advanced classes must furnish a satisfactory certificate of time spent in dental or medical studies, and must pass examinations in the branches already pursued by the class to which they seek admittance.

Graduates of recognized dental schools and reputable practitioners of dentistry who have never received a degree will be admitted without examination to the courses in Operative and Prosthetic Dentistry, but attendance on such courses does not entitle a student to examination for the degree. A certificate of attendance will be furnished when desired.

DENTAL FACULTIES ASSOCIATION OF AMERICAN UNIVERSITIES

The schools holding membership in this Association are the Thomas W. Evans Museum and Dental Institute School of Dentistry, University of Pennsylvania; University of Michigan, School of Dentistry; University of Iowa, School of Dentistry; University of Minnesota, School of Den-

* The course must have included the subjects which we require for entrance, or their equivalents.

tistry; University of California, School of Dentistry; Washington University Dental School; Harvard University Dental School.

Applicants for advanced standing who have attended any of the above schools will be given credit for examinations passed in those schools.

GENERAL REGULATIONS

REGISTRATION BLANKS

Candidates for admission by examinations should register for such examinations on a form which may be obtained from the Dean of the Harvard Dental School. The Registration Blanks of all candidates who wish to take examinations in June should be properly filled and in the hands of the Dean by June 3; those of candidates who wish to take examinations in September, by September 2.

GOOD ENGLISH

The requirement of good English is insisted on in papers in all subjects throughout the entrance examinations. However excellent in substance, no examination will be considered entirely satisfactory unless it is free from elementary errors in spelling, usage, punctuation, grammar, sentence-structure, and paragraphing. When the answers are of considerable length, candidates are advised to plan them before they begin to write. In every case, they are urged to save the last few minutes of the examination for the revision and correction of details.

LABORATORY EXAMINATIONS

A candidate who is examined in any study in which a laboratory examination is held will hand in his laboratory note-book at *the hour of the laboratory examination*. Laboratory note-books will be deposited, after examination, in the College office, where they will be kept for one year, subject to the order of the owners.

A candidate examined in June at any place where a laboratory examination is not provided will be required to take such an examination in Cambridge in the autumn; but if he passes the written examination in June and presents a satisfactory note-book, the subject will be temporarily counted in his favor in determining the question of his admission to the School.

EXAMINATION PAPERS

A set of recent examination papers will be sent free to any address, on application to the Dean of the Harvard Dental School, Longwood Avenue, Boston. Separate papers may be had in quantities of not less than *six* copies of any *one paper* (not one each of six different papers) at ten cents a dozen.

REQUIREMENTS FOR ADMISSION

Examinations for admission to the Harvard Dental School will be held in the following subjects. Each candidate must offer studies amounting to 16 points. Sections 1, 2, 3, 4, 5 are required. Electives may be chosen from Section 6.

The figure attached to each study indicates the relative weight (termed points) which will be given to it in determining the question of the candidate's fitness for admission.

1. English (4)

2. Physics (2)

3. Latin (4)

or French (2) and English, *or* American, *or* Mediaeval and Modern History (2)

or French (2) and Greek and Roman History (2)

or German (2) and English, *or* American, *or* Mediaeval and Modern History (2)

or German (2) and Greek and Roman History (2)

4. Theoretical and Descriptive (Inorganic) Chemistry (2)

5. Algebra (2)

In addition he will be obliged to offer either —

6. Plane Geometry (2)

Or any two of the following: —

Solid Geometry (1)

Botany (1)

Zoölogy (1)

Wood-working (1)

Blacksmithing (1)

Chipping, Filing, and Fitting (1)

Machine-tool Work (1)

The examinations in the above subjects will be the same as those given in these subjects (elementary grade) for admission to Harvard College.

The examination in Theoretical and Descriptive (Inorganic) Chemistry will be given at the Harvard Dental School.

TIMES AND PLACES OF EXAMINATIONS FOR ADMISSION

Examinations for admission to the Harvard Dental School are held in June at Cambridge and at about fifty other cities in the United States*; in September they are held at Cambridge only.

* A circular giving a full list of the places where the examinations will be held will be ready in March, 1915, and may be had on application to the Dean of the Dental School.

ORDER OF EXAMINATIONS (JUNE AND SEPTEMBER)

In September, examinations will be held in Cambridge only.

Monday, June 14, and Wednesday, September 15

10.00–11.00	Botany.	2.00–4.00	Elementary History (Ancient and English).
11.15–12.15	Zoölogy.	4.15–6.15	Elementary History (Mediaeval and Modern, and American).

Tuesday, June 15, and Thursday, September 16

8.00– 9.00	Chipping, Filing, and Fitting.	2.00–3.00	Elementary Physics.
9.15–10.15	Blacksmithing.	3.45–4.45	Elementary Chemistry.
10.30–11.30	Machine-tool Work.		
11.45–12.45	Wood-working.		

Wednesday, June 16, and Friday, September 17

8.00–11.00	Elementary English.	3.15–6.15	Latin (Elementary and Advanced).
------------	---------------------	-----------	----------------------------------

Thursday, June 17, and Saturday, September 18

8.00–10.00	Plane Geometry.	1.30–4.30	German (Elementary and Advanced).
10.15–11.45	Solid Geometry.	4.45–6.15	Elementary Algebra.

Friday, June 18, and Monday, September 20

8.00–11.00	French (Elementary and Advanced).
------------	-----------------------------------

STUDIES IN WHICH EXAMINATIONS ARE HELD

Examinations for admission will be held in the studies contained in the following list and in accordance with the requirements in each study therein defined.

ENGLISH

Requirements for 1915, 1916, 1917, 1918, and 1919

The study of English in school has two main objects: (1) command of correct and clear English, spoken and written; (2) ability to read with accuracy, intelligence, and appreciation.

GRAMMAR AND COMPOSITION

The first object requires instruction in grammar and composition. English grammar should ordinarily be reviewed in the secondary school; and correct spelling and grammatical accuracy should be rigorously exacted in connection with all written work during the four years. The principles of English composition governing punctuation, the use of words, sentences, and paragraphs, should be thoroughly mastered; and practice in composition, oral as well as written, should extend throughout the secondary school period. Written exercises may well comprise letter-writing, narration, description, and easy exposition and argument. It is advisable that subjects for this work be taken from the student's personal experience, general knowledge, and studies other than English, as well as from his reading in literature. Finally, special instruction in language and composition should be accompanied by concerted effort of teachers in all branches to cultivate in the student the habit of using good English in his recitations and various exercises, whether oral or written.

LITERATURE

The second object is sought by means of two lists of books, headed respectively *Reading* and *Study*, from which may be framed a progressive course in literature covering four years. In connection with both lists, the student should be trained in reading aloud and be encouraged to commit to memory some of the more notable passages both in verse and in prose. As an aid to literary appreciation, he is further advised to acquaint himself with the most important facts in the lives of the authors whose works he reads and with their place in literary history.

(a) *Reading*

The aim of this course is to foster in the student the habit of intelligent reading and to develop a taste for good literature, by giving him a first-hand knowledge of some of its best specimens. He should read the books carefully, but his attention should not be so fixed upon details that he fails to appreciate the main purpose and charm of what he reads.

With a view to large freedom of choice, the books provided for reading are arranged in the following groups, from each of which at least two selections are to be made, except as otherwise provided under Group I: —

Group I. Classics in Translation. — The Old Testament, comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the books of Ruth and Esther; the Odyssey, with the omission, if desired, of Books I, II, III, IV, V, XV, XVI, XVII; the Iliad, with the omission, if desired, of Books XI, XIII, XIV, XV, XVII, XXI; the Aeneid. The Odyssey, Iliad, and

Aeneid should be read in English translations of recognized literary excellence.

For any selection from this group a selection from any other group may be substituted.

Group II. Shakspeare.—Midsummer Night's Dream; Merchant of Venice; As You Like It; Twelfth Night; The Tempest; Romeo and Juliet; King John; Richard II; Richard III; Henry V; Coriolanus; Julius Caesar*; Macbeth*; Hamlet*.

Group III. Prose Fiction.—Malory's Morte d'Arthur (about 100 pages); Bunyan's Pilgrim's Progress, Part I; Swift's Gulliver's Travels (voyages to Lilliput and to Brobdingnag); DeFoe's Robinson Crusoe, Part I; Goldsmith's Vicar of Wakefield; Frances Burney's Evelina; Scott's Novels (any one); Jane Austen's Novels (any one); Maria Edgeworth's Castle Rackrent, or The Absentee; Dickens's Novels (any one); Thackeray's Novels (any one); George Eliot's Novels (any one); Mrs. Gaskell's Cranford; Kingsley's Westward Ho! or Hereward, the Wake; Reade's The Cloister and the Hearth; Blackmore's Lorna Doone; Hughes's Tom Brown's Schooldays; Stevenson's Treasure Island, or Kidnapped, or Master of Ballantrae; Cooper's Novels (any one); Poe's Selected Tales; Hawthorne's The House of the Seven Gables, or Twice-Told Tales, or Mosses from an Old Manse; a collection of Short Stories by various standard writers.

Group IV. Essays, Biography, etc.—Addison and Steele's The Sir Roger de Coverley Papers, or Selections from the Tatler and Spectator (about 200 pages); Boswell's Selections from the Life of Johnson (about 200 pages); Franklin's Autobiography; Irving's Sketch Book (about 200 pages), or Life of Goldsmith; Southey's Life of Nelson; Lamb's Essays of Elia (about 100 pages); Lockhart's Life of Scott (about 200 pages); Thackeray's Lectures on Swift, Addison, and Steele in the English Humourists; Macaulay's Lord Clive, Warren Hastings, Milton, Addison, Goldsmith, Frederic the Great, Madame d'Arblay (any one); Trevelyan's Life of Macaulay (about 200 pages); Ruskin's Sesame and Lilies, or Selections (about 150 pages); Dana's Two Years before the Mast; Selections from Lincoln, including at least the two Inaugurals, the Speeches in Independence Hall and at Gettysburg, the Last Public Address, and the Letter to Horace Greeley, together with a brief memoir or estimate; Parkman's The Oregon Trail; Thoreau's Walden; Lowell's Selected Essays (about 150 pages); Holmes's The Autocrat of the Breakfast Table; Stevenson's An Inland Voyage, and Travels with a Donkey; Huxley's Autobiography, and selections from Lay Sermons, including the addresses on Improving Natural Knowledge, A Liberal Education, and

* If not chosen for study under (b).

A Piece of Chalk; a collection of Essays by Bacon, Lamb, DeQuincey, Hazlitt, Emerson, and later writers; a collection of Letters by various standard writers.

Group V. Poetry. — Palgrave's Golden Treasury (First Series), Books II and III, with special attention to Dryden, Collins, Gray, Cowper, and Burns; Palgrave's Golden Treasury (First Series), Book IV, with special attention to Wordsworth, Keats, and Shelley (if not chosen for study under *b*); Goldsmith's The Traveller, and The Deserted Village; Pope's The Rape of the Lock; a collection of English and Scottish Ballads, as, for example, some Robin Hood ballads, The Battle of Otterburn, King Estmere, Young Beichan, Bewick and Grahame, Sir Patrick Spens, and a selection from later ballads; Coleridge's The Ancient Mariner, Christabel, and Kubla Khan; Byron's Childe Harold, Canto III or IV, and The Prisoner of Chillon; Scott's The Lady of the Lake, or Marmion; Macaulay's The Lays of Ancient Rome, The Battle of Naseby, The Armada, Ivry; Tennyson's The Princess, or Gareth and Lynette, Lancelot and Elaine, and The Passing of Arthur; Browning's Cavalier Tunes, The Lost Leader, How They Brought the Good News from Ghent to Aix, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, Hervé Riel, Pheidippides, My Last Duchess, Up at a Villa—Down in the City, The Italian in England, The Patriot, The Pied Piper, "De Gustibus"—, Instans Tyrannus; Arnold's Sohrab and Rustum, and The Forsaken Merman; Selections from American Poetry, with special attention to Poe, Lowell, Longfellow, and Whittier.

(*b*) Study

This part of the requirement is intended as a natural and logical continuation of the student's earlier reading, with greater stress laid upon form and style, the exact meaning of words and phrases, and the understanding of allusions. The books provided for study are arranged in four groups, from each of which one selection is to be made.

Group I. Drama. — Shakspere's Julius Caesar, Macbeth, Hamlet.

Group II. Poetry. — Milton's L'Allegro, Il Penseroso, and either Comus or Lycidas; Tennyson's The Coming of Arthur, The Holy Grail, and The Passing of Arthur; the selections from Wordsworth, Keats, and Shelley in Book IV of Palgrave's Golden Treasury (First Series).

Group III. Oratory. — Burke's Speech on Conciliation with America; Macaulay's Two Speeches on Copyright, and Lincoln's Speech at Cooper Union; Washington's Farewell Address, and Webster's First Bunker Hill Oration.

Group IV. Essays. — Carlyle's Essay on Burns, with a selection from Burns's Poems; Macaulay's Life of Johnson; Emerson's Essay on Manners.

EXAMINATION

However accurate in subject-matter, no paper will be considered satisfactory if seriously defective in punctuation, spelling, or other essentials of good usage.

The examination will be divided into two parts, one of which will be on grammar and composition, and the other on literature.

In grammar and composition, the candidate may be asked specific questions upon the practical essentials of these studies, such as the relation of the various parts of a sentence to one another, the construction of individual words in a sentence of reasonable difficulty, and those good usages of modern English, which one should know in distinction from current errors. The main test in composition will consist of one or more essays, developing a theme through several paragraphs; the subjects will be drawn from the books read, from the candidate's other studies, and from his personal knowledge and experience quite apart from reading. For this purpose the examiner will provide several subjects, perhaps eight or ten, from which the candidate may make his own selections. He will not be expected to write more than four hundred words per hour.

The examination in literature will include : —

A. General questions designed to test such a knowledge and appreciation of literature as may be gained by fulfilling the requirements defined under (a) *Reading*, above. The candidate will be required to submit a list of the books read in preparation for the examination, certified by the principal of the school in which he was prepared; but this list will not be made the basis of detailed questions.

B. A test on the books prescribed for study, which will consist of questions upon their content, form, and structure, and upon the meaning of such words, phrases, and allusions as may be necessary to an understanding of the works, and an appreciation of their salient qualities of style. General questions may also be asked concerning the lives of the authors, their other works, and the periods of literary history to which they belong.

In place of the Harvard examination in Elementary English, a candidate may offer the examinations in English of the College Entrance Examination Board.

LATIN

The examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least three years. It will also test the attainment of those who have pursued the subject four years or more. The passages set for translation must be rendered into simple and idiomatic English.

The examination paper will include passages of Latin prose and verse of varying degrees of difficulty to be translated at sight, passages from Cicero's orations for the Manilian law and for Archias, and from Virgil's Aeneid, I, II, IV, or I, II, VI, with questions on the subject-matter, literary and historical allusions, and, in the case of Virgil, on prosody, and passages for Elementary and Advanced Latin Composition. Questions on forms, syntax, and the idioms of the language may be asked in connection with any part of the examination.

SUBSTITUTES FOR HARVARD EXAMINATIONS IN LATIN

In place of the Harvard examination in Elementary Latin a candidate may offer the following examinations of the College Entrance Examination Board:—

Latin. (These must be offered the same year.)

N. R. 1. Grammar.

N. R. 2. Elementary Prose Composition.

{ N. R. 4. Cicero and Sight Translation of Prose; *or*,
{ N. R. 5. Virgil and Sight Translation of Poetry.

RECOMMENDATIONS

In accordance with the report of the Commission on Entrance Requirements in Latin, which met at Cleveland in October, 1909, the Department of the Classics makes the following recommendations:—

(a) The *minimum* course of reading pursued in preparation for the examination in Latin should include, in addition to such easy reading as usually accompanies an introductory book, at least 175 pages of Latin prose and at least 5000 verses of Latin poetry, which is approximately equivalent to Caesar's Gallic War, I-IV; Cicero's orations for the Manilian Law, against Catiline, and for Archias; and Virgil's Aeneid, I-VI. This minimum amount of reading should be selected from the following authors and works: Caesar (Gallic War and Civil War), Nepos (Lives), Cicero (Orations, Letters, and De Senectute), Sallust (Catiline and Jugurthine War), Virgil (Bucolics, Georgics, and Aeneid), and Ovid (Metamorphoses, Fasti, and Tristia). Schools are urged to read much more than the minimum amount and to enlarge the range of authors from whose works reading is selected.

(b) In preparation for the elementary examination at least 175 pages of prose should be read (for 85 of which the corresponding amount of poetry may be substituted). The prescribed Cicero or the prescribed Virgil should be included in this reading. For the advanced examination the reading of the student in both poetry and prose should be considerably extended, and he should continue his work in composition. His work should include the prescribed Virgil, in case he studied the prescribed Cicero in preparation for the elementary examination, or *vice versa*.

The pupil should be constantly guided in proper methods of reading, and trained to read the Latin intelligently, as Latin, before undertaking to render it into idiomatic English. There should be constant practice in

reading aloud, with due expression, and in hearing the language read. In connection with the reading, to ensure thoroughness and accuracy in the pupil's understanding of the language, the study of grammar, with some practice in writing Latin, should be maintained throughout the course. There should also be frequent written translations into idiomatic English.

To prepare for the advanced examination in Latin Composition, pupils should be trained, from an early stage of the preparatory course, to render into Latin not merely detached sentences, illustrative of constructions, but also passages of connected narrative or description, prepared by the teacher on the basis of the prose authors read.

GERMAN

(a) The translation at sight of simple German prose. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) The translation into German of simple English sentences, or of easy connected prose, to test the candidate's familiarity with elementary grammar.

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than two hundred pages of easy German (including reading at sight in class).

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugation of the weak and the more usual strong verbs; the declension of articles, adjectives, pronouns, and such nouns as are readily classified; the commoner prepositions; the simpler uses of the modal auxiliaries; the elements of syntax, especially the rules governing the order of words.

Pronunciation should be carefully taught, and the pupils should have frequent opportunities to hear German spoken or read aloud. The writing of German from dictation is recommended as a useful exercise.

In place of the Harvard examination in Elementary German, a candidate may offer Elementary German of the College Entrance Examination Board.

FRENCH

(a) The translation at sight of ordinary Nineteenth Century prose. (The passages set for translation must be rendered into simple and idiomatic English.)

(b) The translation into French of simple English sentences or of easy connected prose, to test the candidate's familiarity with elementary grammar. Proficiency in grammar may also be tested by direct questions, based on the passages set for translation under (a).

The passages set for translation into English will be suited to the proficiency of candidates who have read not less than four hundred pages (including reading at sight in class) from the works of at least three

different authors. It is desirable that a portion of the reading should be from works other than works of fiction.

Grammar should be studied concurrently with the reading as an indispensable means of ensuring thoroughness and accuracy in the understanding of the language. The requirement in elementary grammar includes the conjugations of regular verbs, of the more frequent irregular verbs, such as *aller, envoyer, tenir, pouvoir, voir, vouloir, dire, savoir, faire*, and those belonging to the classes represented by *ouvrir, dormir, connaître, conduire*, and *craindre*; the forms and positions of personal pronouns and of possessive, demonstrative, and interrogative adjectives; the inflection of nouns and adjectives for gender and number, except rare cases; the uses of articles, and the partitive constructions.

Pronunciation should be carefully taught, and pupils should have frequent opportunities to hear French spoken or read aloud. The writing of French from dictation is recommended as a useful exercise.

Candidates in Elementary French may, as an alternative, follow the recommendations for preparation in Elementary French, as stated by the College Entrance Examination Board.

HISTORY (INCLUDING HISTORICAL GEOGRAPHY)

ELEMENTARY HISTORY

Any one of the four following fields of historical study may be offered but not more:—

1. *Ancient History*.—Questions will be asked on the entire period to 800 A.D.; but candidates whose instruction has been limited to Greek and Roman History will be given an opportunity by means of alternate questions to show their more thorough knowledge of that field.

2. *European History*.—Since 800 A.D., with special attention to the modern period.

3. *English History*, with due reference to social and political development.

4. *American History*, with the elements of Civil Government.

For preparation in each of the four elementary subjects, a course of study equivalent to at least five lessons a week for one year will be necessary.

The candidate will be expected to show on examination such general knowledge of each field as may be acquired from the study of an accurate text-book of not less than 500 pages, supplemented by suitable parallel readings amounting to not less than 1000 pages. The examination will call for comparison of historical characters, periods, and events, and in general for the exercise of judgment as well as of memory. Geographical knowledge will be tested by means of an outline map.

In the judgment of the Department of History, it is desirable that Ancient History be offered as a part of the preparation of every candidate.

In place of any one of the four examinations described above, a candidate may offer the corresponding examination in History of the College Entrance Examination Board.

MATHEMATICS

A thorough practical acquaintance with ordinary Arithmetic is assumed as underlying all preparation in Mathematics. Knowledge of the fundamental principles of Arithmetic and careful training in accurate computation with whole numbers and with vulgar and decimal fractions form an essential part of early school work. But the pupil's time should not be wasted in the solution by arithmetic of puzzling problems which properly belong to algebra, or in complicated and useless reductions, or in the details of commercial arithmetic. It is desirable that some familiarity with algebraic expressions and symbols, including the methods of solving simple equations, be acquired in connection with the course in Arithmetic.

ELEMENTARY MATHEMATICS

Elementary Algebra. — Algebra, through Quadratic Equations.

The requirement in Algebra includes the following subjects: factors, common divisors and multiples, fractions, ratios and proportions; negative quantities and the interpretation of negative results; the doctrine of exponents; radicals and equations involving radicals; the binomial theorem for positive integral powers of the binomial, and the extraction of roots; arithmetical and geometrical progressions; putting questions into equations and the reduction of equations; the ordinary methods of elimination and the solution of both numerical and literal equations of the first and second degrees with one or more unknown quantities and of problems leading to such equations.

The student should cover carefully the whole ground here specified, and should acquire a thorough understanding not only of the practice, but of the reasons involved in the elementary algebraic rules; for example, in the rules of multiplication, of signs, and of exponents, in the rules for fractions, and in those relating to the reduction and solution of equations. He should train himself to practical skill by the solution of a large number of examples, and should learn to do his work with reasonable quickness, as well as with confidence, accuracy, and clearness. The solution of fairly complicated literal quadratics, the various methods of elimination for equations of the first two degrees, the putting of problems in a neat manner into equations, and the working of the various algebraic operations both for integral and fractional expressions may be mentioned as important subjects of attention. The student should be taught to arrange his work in a clear, orderly, and compact fashion.

The time supposed to be devoted to the systematic study of the requirement in Algebra is the equivalent of a course of three lessons a week through two school years.

In place of the Harvard examination in Elementary Algebra a candidate may offer Mathematics a I and a II, Elementary Algebra complete, of the College Entrance Examination Board.

Plane Geometry.—Plane Geometry, including problems in mensuration and original propositions.

Geometric education should begin in the kindergarten or primary school, where the child should acquire familiarity through the senses with simple geometric forms, by inspecting, drawing, modelling, and measuring them, and noting their more obvious relations. This study should be followed, in the grammar school, by systematic instruction in Concrete (or Observational) Geometry, of which geometric drawing should form a part. Such instruction should include the main facts of Plane and Solid Geometry, treated as matters of observation, and not as exercises in logical deduction, without however necessarily excluding the beginnings of deductive proof as soon as the pupil is ready for them. Concrete Geometry is believed to have important educational value, and to prepare an excellent foundation for the later study of Formal Geometry. It belongs, however, to the earlier stages of school work, and should not be postponed until the time that belongs to direct preparation for the college.

In teaching Formal Geometry, stress should be laid from the outset on accuracy of statement and elegance of form, as well as on clear and strict reasoning. As soon as the pupil has begun to acquire the art of rigorous demonstration, his work should cease to be merely receptive, he should be trained to devise constructions and demonstrations for himself, and this training should be carried through the whole of the work in Plane Geometry. Teachers are advised, in their selection of a text-book, to choose one having a clear tendency to call out the pupil's own powers of thought, prevent the formation of mechanical habits of study, and encourage the concentration of mind which it is a part of the discipline of mathematical study to foster. The subject of Geometry, not a particular treatise, is what the pupil should be set to learn; and its simpler methods and conceptions should be made a part of his habitual and instinctive thought. Lastly, the pupil should be stimulated to good work by interest in the study felt and exhibited by the teacher.

The requirement in Plane Geometry embraces the following topics: the general properties of plane rectilinear figures; the circle and the measure of angles; similar polygons; areas; regular polygons, and the measure of the circle. The propositions required under these several heads are those only which are contained in the older treatises, and which are recognized as constituting the Elements of Plane Geometry. The examination does not include the additions introduced into some recent text-books, although most of those additions are in themselves valuable for the student who has time and taste for extra study in this field. A syllabus of the required propositions has been prepared. [*This Syllabus may be obtained, price 10 cents, at the Office of the Harvard University Press, 2 University Hall, Cambridge.*]

The examination also includes original propositions in Plane Geometry, based on the propositions named in the Syllabus, and problems in mensuration; but excellence in bookwork and in exercises immediately illustrating bookwork will be allowed to offset in part any lack of skill in original work.

The time which it is recommended to assign to the systematic study of the requirement in Formal Geometry is the equivalent of a course of five lessons a week for one school year; but it is believed to be advisable to extend this allowance of time over two years.

In place of the Harvard examination in Plane Geometry a candidate may offer Mathematics *c*, Plane Geometry, of the College Entrance Examination Board.

PHYSICAL SCIENCE*

ELEMENTARY PHYSICS

The instruction given in this course should accord with the following specifications, which are taken from the revised statement of the requirement in Elementary Physics as adopted by the College Entrance Examination Board in 1909:—

1. The unit in Physics [full requirement] consists of at least 120 hours of 60 minutes each. Time spent in the laboratory shall be counted at one-half face value.
2. The course of instruction in Physics should include:—
 - (a) The study of one standard text-book for the purpose of obtaining a connected and comprehensive view of the subject. The student should be given opportunity and encouragement to consult other scientific literature.
 - (b) Instruction by lecture table demonstrations to be used mainly for illustration of the facts and phenomena of Physics in their qualitative aspects and in their practical applications.
 - (c) Individual laboratory work, consisting of experiments requiring at least the time of 30 double periods [60 full hours in all]. The experiments performed by each student should number at least 30.
3. Throughout the whole course special attention should be paid to the common illustrations of physical laws and to their industrial applications.
4. In the solution of numerical problems the student should be encouraged to make use of the simple principles of algebra and geometry to reduce the difficulties of solution. Unnecessary mathematical difficulties should be avoided and care should be exercised to prevent the student's losing sight of the concrete facts, in the manipulation of symbols.

The Examination—The candidate is required to pass both a written examination and a laboratory examination.

The written examination, in place of which the corresponding examination given by the College Entrance Board will be accepted, will contain more questions than any one candidate is expected to answer, in order to make allowance for a considerable diversity of instruction in different schools.

* For rules relating to the time of handing in note-books and to candidates examined in June in places where no laboratory examination is provided, see page 23.

The laboratory examination, in the course of which oral questioning may be freely used, will require performance by the candidate of a number of experiments assigned to him at the time by the examiner, the range of assignment being limited by the following provision: The candidate must name as the basis for his laboratory examination at least thirty exercises selected from a list of about fifty, described in a publication issued by the University under the title *Descriptive List of Elementary Exercises in Physics*.*

This laboratory examination may occupy the candidate from one and a half to two and a half hours, no time limit, as a rule, being set for it.

The candidate is required to present a note-book in which he has recorded the steps and the results of his laboratory exercises, and this note-book must bear the endorsement of his teacher, certifying that the notes are a true record of the pupil's work. It should contain a table of contents of the exercises which it describes. These exercises need not be the same as those upon which the candidate presents himself for the laboratory examination, but should be equivalent to them in amount and grade of quantitative work.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that his work has been of such a character as to raise a presumption in favor of his preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in physics. Experience has shown that pupils can make the original record of their observations entirely presentable, so that copying will be unnecessary, and they should in general be required to do so.

In place of the Harvard *written* examination in Physics, a candidate may offer the examination in Physics of the College Entrance Examination Board.

Chemistry. † — A course of at least sixty experiments, performed at school by the pupil and accompanied with systematic instruction in principles and their applications. An approximate idea of the preparation required for the written examination in Elementary Chemistry may be found in the Revised Requirements in Chemistry issued by the College Entrance Examination Board (Sub-station 84, New York). It should be noted, however, that the Harvard requirements include also Gay Lussac's Law of Combining Volumes and Avogadro's Hypothesis, and that sixty, not forty, laboratory experiments of satisfactory length and quality are expected.

The candidate is required to pass both a written and a laboratory examination. The written examination will test his acquaintance with the facts and principles of Chemistry. The laboratory examination will test both his skill in performing experiments and his grasp of the principles in-

* This list may be obtained, price 40 cents, at 2 University Hall, Cambridge.

† The course will be mainly an experimental course in theoretical chemistry, but there will be experiments covering all branches of pure chemistry.

volved in them. The candidate is further required to present the original note-book in which he recorded the steps and results of the experiments which he performed at school, and this note-book must bear the endorsement of his teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes.

The note-book is required as proof that the candidate has formed the habit of keeping a full and intelligible record of laboratory work through an extended course of experiments, and that his work has been of such a character as to raise a presumption in favor of his preparation for the examination. But much greater weight will be given to the laboratory examination than to the note-book in determining the candidate's attainments in Chemistry.

In place of the Harvard *written* examination in Chemistry, a candidate may offer the examination in Chemistry of the College Entrance Examination Board.

BOTANY AND ZOÖLOGY

Botany.—A course of study and laboratory work equivalent to that indicated in an "Outline of Requirements in Botany," issued by the University. The course should extend through at least half of a school year, with five lessons a week. The laboratory work is to be directed especially to the external anatomy and the activities of our common plants.

Zoölogy.—A course of study and laboratory work equivalent to that described in a pamphlet entitled "An Outline of Requirements in Zoölogy," issued by the University. The course should extend through at least half of a school year, with five lessons a week, and should include the laboratory study of at least ten types of animals, with special reference to their external anatomy and their activities. These types are to be selected in accordance with directions given in the pamphlet named.

In Botany and in Zoölogy the candidate will be required to pass both a written and a laboratory examination. The written examination will test the range and thoroughness of his knowledge of the subject. The laboratory examination will test his skill in observation and experimentation, and his ability to apply names properly to the parts of the organisms studied.*

At the time of the laboratory examination the candidate must present the original note-book containing (with dates) the notes and drawings he has made in the course of his laboratory work, and bearing the endorsement of his teacher, certifying that the book is a true record of the pupil's own observations and experiments. An index of subjects should be appended.

In place of the Harvard *written* examinations in Botany and Zoölogy, candidates may offer the examinations in Botany and Zoölogy of the College Entrance Examination Board.

* For rules relating to laboratory examinations and note-books, see page 23.

SHOPWORK

A course of instruction in the use of tools and in the ordinary processes employed in the working of wood or metal, equivalent to that described in a pamphlet entitled "An Outline of Requirements in Shopwork," issued by the University. The course may embrace one or more of the following divisions: —

<i>Wood-working ;</i>	<i>Chipping, Filing, and Fitting ;</i>
<i>Blacksmithing ;</i>	<i>Machine-tool Work.</i>

The candidate must be familiar with the names, construction, and operation of the tools commonly used in these processes, and will be expected to read ordinary mechanical drawings and to make freehand sketches of articles which are to be produced in the workshop.

The candidate is required to pass both a written and a laboratory examination.* The written examination will test his knowledge of tools and mechanical processes, and of the properties of materials of common use in construction. He will be expected to show familiarity with approved methods for simple work in the branch in which he presents himself for examination, and to write an intelligible description of those methods, illustrated by such sketches as may be necessary to make them clear. The laboratory examination will test the candidate's skill in the use of tools. He will receive the materials and specifications for a piece of work, and will be expected to select his tools, preparing them for use if necessary, and to demonstrate satisfactorily his knowledge and skill.

Every candidate is further required to present the original note-book in which he entered the descriptions and sketches of the work he performed at school; and with this he may present, as evidence of his skill in the workshop, the models made by him at school. Both the note-book and the models must be accompanied by the endorsement of his teacher, certifying that the book is a true record, and that the models are specimens of the pupil's own work.

COLLEGE ENTRANCE EXAMINATION BOARD

In June, 1915, papers of the College Entrance Examination Board may be substituted for corresponding papers set for the separate admission examinations held by Harvard University under the "old plan," but no candidate may offer both Harvard and Board examinations in the same subjects. For more particular information apply to Mr. J. G. Hart, Secretary, 20 University Hall, Cambridge.

The examinations of the Board will be held June 14–19, 1915. Applications to attend the Board's examinations must be addressed to the Secretary of the College Entrance Examination Board, Post Office Sub-Station 84, New York, N.Y., and must be made upon a blank form to be obtained from the Secretary of the Board upon application.

* For rules relating to laboratory examinations and note-books, see page 23.

Applications for examination at points in the United States east of the Mississippi River (also at points on the Mississippi River) must be received by the Secretary at least two weeks in advance of the examinations, that is, on or before Monday, May 31, 1915; applications for examination elsewhere in the United States or in Canada must be received at least three weeks in advance of the examinations, that is, on or before Monday, May 24, 1915; and applications for examination at points outside the United States and Canada must be received at least five weeks in advance of the examinations, that is, on or before Monday, May 10, 1915.

Applications received later than the dates named will be accepted when it is possible to arrange for the examinations of the candidates concerned, but only upon the payment of \$5.00 in addition to the usual examination fee.

The examination fee is \$5.00 for all candidates examined at points in the United States and Canada, and \$15.00 for all candidates examined at points outside of the United States and Canada. The fee (which cannot be accepted in advance of the application) should be remitted by postal order, express order, or draft on New York, to the order of the College Entrance Examination Board.

A list of the places at which examinations are to be held by the Board will be published about March 1. Requests that the examinations be held at particular points, to receive proper consideration, should be addressed to the Secretary of the Board not later than February 1.

REGISTRATION

The academic year 1915-16 begins on Monday, September 27, 1915. All students register at the Dental School, Longwood Avenue, on that day, at 9 A.M.

ARRANGEMENT OF STUDIES

The following is the plan of study in the successive years of the School:—

First Year.—Mammalian Anatomy, Physiology, Physiological, Pathological, and Dental Chemistry, and Metallurgy; Histology and Embryology, Anatomy-dissection, General Pathology.

Second Year.—Oral Pathology, Operative Dentistry, Oral Surgery, Prosthetic Dentistry and Orthodontia; Porcelain Work; General and Dental Materia Medica and Therapeutics; Bacteriology; Clinical Chemistry, Crown and Bridge Work; practical work daily in the prosthetic laboratory and in the operative infirmary.

Third Year.—Operative Dentistry, Oral Surgery, Prosthetic Dentistry, Orthodontia, Porcelain Work, Neurology, Surgical Pathology and Surgery, Crown and Bridge Work; Applied Therapeutics; Dental Jurisprudence; Roentgenology; practical work in prosthetic laboratory and operative infirmary.

METHODS OF INSTRUCTION

DENTAL AND PHYSIOLOGICAL CHEMISTRY

H. CARLTON SMITH, Ph.G., *Lecturer on Dental Chemistry.*

FRED M. RICE, A.M., *Instructor in Chemistry.*

This course aims to make practical application of the various branches of chemical science to meet the requirements of the student of Dental Medicine.

Particular attention is given to the study of saliva and urine and, as far as possible, to the determination of relations which may exist between these fluids and pathological conditions of interest in dental practice.

During the first year this work includes laboratory methods, analysis, etc., and forms a part of the course in Physiological Chemistry.

In the second year the entire time is devoted to the study of urine and saliva. The samples for analysis are obtained from infirmary patients and whenever practicable from the same patient for whom the student is doing actual dental work.

The analyses of urine are studied particularly from a standpoint of body metabolism, and considered with the analyses of saliva and conditions found in the mouth. A comprehensive basis is thus furnished for the study of cause and effect and general information is obtained essential to the undertaking of subsequent investigation of an original character. Research work is encouraged and opportunities for special investigation will be offered such students as can give the necessary time in the laboratory.

The Dental Chemistry includes instruction in blow-pipe work, the principles of volumetric analysis, and the assay of dental alloys; also micro-chemical tests, with special reference to the examination of local anaesthetics and antiseptics; the chemistry of the teeth, salivary calculus and saliva.

The Physiological Chemistry includes a short introductory course in Organic Chemistry sufficient for an intelligent consideration of the composition of the carbohydrates and protein, their relationship, chemical properties, and methods of precipitation and separation; also the chemistry of digestion, of the different tissues, fat, muscle, etc., of bile, lymph, milk, and urine.

Text-books.—Chemistry for Dental Students, Smith. Dental Metallurgy, Essig. Practical Physiological Chemistry, Hawk. Examination of the Urine, Saxe.

Collateral Reading.—Medical Chemistry and Toxicology, Holland. Physiological Chemistry, Hammarsten or Novy. Halliburton, Text-book of Chemical Physiology and Pathology. Simon, Physiological Chemistry. Bunge, Physiologic and Pathologic Chemistry. Gamgee, Physiological Chemistry of the Animal Body. Lea, Chemical Basis of the Animal Body (appendix to Foster's Text-book of Physiology). Vaughan and Novy, Cellular Toxins. Diseases of Metabolism and Nutrition, by Dr. Carl von Noorden. The Principles of Animal Nutrition, Armsby. Mitchell's Dental Chemistry. Dorland's American Illustrated Medical Dictionary.

FIRST YEAR

Lectures. Mr. SMITH. *Five times a week throughout the first half of first year and once a week for eight weeks during the second year.* 85

Demonstrations or Laboratory Experiments. Mr. SMITH and Mr. RICE. *Three hours a day, five times a week throughout the first half of first year and once a week for eight weeks during the second year.* 237

ANATOMY

— —, *James Stillman Professor of Comparative Anatomy, and Director of the Laboratory of Anatomy.*

HARRIS P. MOSHER, M.D., *Instructor in Anatomy, and Assistant Professor of Laryngology.*

JOHN L. BREMER, M.D., *Assistant Professor of Histology.*

JOHN WARREN, M.D., *Assistant Professor of Anatomy.*

DAVID CHEEVER, M.D., *Assistant Professor of Surgical Anatomy.*

FREDERIC T. LEWIS, M.D., *Assistant Professor of Embryology.*

ALEXANDER S. BEGG, M.D., *Instructor in Comparative Anatomy.*

ROBERT M. GREEN, M.D., *Instructor in Anatomy.*

ARCHIBALD MCK. FRASER, M.D., *Assistant in Anatomy.*

WALTER M. BOOTHBY, M.D., *Assistant in Anatomy.*

EDWARD H. RISLEY, M.D., *Assistant in Anatomy.*

JOHN BRYANT, M.D., *Assistant in Anatomy.*

TORR W. HARMER, M.D., *Assistant in Anatomy.*

RICHARD H. MILLER, M.D., *Assistant in Anatomy.*

GEORGE W. MORSE, Jr., M.D., *Assistant in Anatomy.*

ANDREW R. MACAUSLAND, M.D., *Assistant in Anatomy.*

KURT H. THOMA, D.M.D., *Assistant in Dental Anatomy.*

EDWARD A. BOYDEN, A.M., *Teaching Fellow in Histology and Embryology.*

MAX M. MILLER, A.M., *Fellow in Histology and Embryology.*

ZABDIEL B. ADAMS, M.D., *Fellow in Anatomy.*

PAUL E. LINEBACK, M.D., *Austin Teaching Fellow in Histology and Embryology.*

The department of anatomy occupies the Morgan Anatomical Building; the dissecting rooms are in the wing designated B I; and the laboratories for histology, embryology, and comparative anatomy, in the wing B II. In addition to the numerous class-rooms, which are well lighted and thoroughly equipped, there are ample accommodations for advanced students, and unusual facilities are at the disposal of qualified investigators. Further information in regard to advanced or special studies may be had upon application to the head of the department. The regular course for dental students is described below.

COURSE FOR FIRST-YEAR STUDENTS

In this course instruction is given in human and comparative anatomy, histology, and embryology. The course occupies the mornings of October and the mornings and afternoons of February, March, April, and the afternoons of May.

Comparative Anatomy. Dissection. The anatomy of the cat will be studied in the mornings of October. A large part of the time will be given to the dissection of the viscera in preparation for the work in physiology.

Human Anatomy. Dissection. During February the class will have daily morning lectures on the skeleton (with the exception of the skull). Each lecture will be followed by a study of the bones or joints, in the laboratory. There will be daily recitations for sections of the class, and several written tests.

In March dissection begins. For this work, which occupies the mornings, the class will be divided into two sections. Section A will dissect the thorax and arm; Section B, the abdomen and leg. Each section will have demonstrations on the cadaver, covering the current dissection, four times a week. Two or three times a week there will be lectures to the whole class on the thoracic, abdominal, and pelvic viscera; and there will be some written tests.

The afternoons of April and May will be devoted to the anatomy of the head and neck. After lectures and laboratory work on the bones, the actual dissection will begin. The dental student is allowed twice as much time as the medical student for dissecting this part, in order that there may

be ample time to study it thoroughly. Special attention will be given to the cavities of the head and face. The student will be expected to study and draw carefully specimens and frozen sections of this region in addition to his own dissection. There will be daily lectures or demonstrations to the whole class, or to sections, and students will be questioned on their work in the dissecting room.

Embryology and Human Histology. The work in microscopic anatomy (including embryology and histology) occupies the afternoons of February and March and the mornings of April.

The first part of this course consists of an introductory study of embryology. The structure of cells, cell division, fertilization and segmentation are first considered. Then follows a study of chick embryos of thirty and forty-eight hours, to give the student a general conception of the primary germ layers and the origin of the organs and tissues. After this the adult tissues and organs are studied, and their structure is correlated with the developmental processes seen in the serial sections of the chick and 12-mm. pig embryos.

Dental Anatomy. The afternoons of May are devoted to oral anatomy and histology. This course consists of daily lectures and laboratory work. The first two weeks the students study the topography of the structures of the oral cavity, by drawing horizontal and frontal sections of the head, later the cross anatomy of the teeth is carefully studied, special attention being given to the pulp chamber and root canals and the occlusion of the teeth. Each student has to draw the various aspects of the different teeth, with sections through the root canals. Extracted teeth are provided, the root canals of which are to be cleaned out, to familiarize the student with the important and difficult work of root canal treatment. The third week is devoted to the histology of the soft and hard tissues and organs of the mouth, while in the fourth week the embryology of the mouth and the development of the teeth receive careful attention. The histological and embryological work is taught by microscopic study, drawings from slides and demonstrations on wax models and lantern slides. Comparative anatomy of the teeth, the theories of evolution to the present type of teeth, and physiognomy of the face also receive careful attention.

Microscopes. Every student is advised to purchase a microscope, but microscopes may be rented at four dollars for the term.

Fees. Each regular dental student is charged a laboratory fee of nine dollars, of which six dollars is for dissecting room material, and three dollars for chemicals and microscopical sections. This laboratory fee is to be paid to the Bursar. At the beginning of the course each student is provided with a locker in the dissecting room and another in the histological laboratory. One dollar is deposited for each locker, to be repaid

on returning the locker keys. At the end of the course any student who has broken or lost material belonging to the laboratory will be charged the cost of replacing the same.

Text-books. — Broomell, Anatomy and Histology of Mouth and Teeth, 4th edition. Gorham and Tower, A Laboratory Guide for the Dissection of the Cat. Minot, Laboratory Text-book of Embryology, 2d edition. Schaefer's Essentials of Histology, 7th edition. Piersol. Cunningham. Gray. Quain. Morris. Gerrish.

Collateral Reading. — Hopewell-Smith, Dental Anatomy and Physiology. Dwight, Clinical Atlas of Variations of Hands and Feet. Cunningham, Manual of Practical Anatomy. Macalister, Human Anatomy. Sobotta McMurrich, Atlas and Text-book of Human Anatomy. Testut, Anatomie Humaine. Poirier, Traité d'Anatomie Humaine. Corning, Lehrbuch der Topographischen Anatomie. Tillaux, Anatomie Topographique.

FIRST YEAR

	<i>October</i>	HOURS
Lectures. Dr. —.	<i>Five times a week.</i>	20
Laboratory work.	<i>Three hours a day, five times a week.</i>	60

February

Lectures. Assistant Professor WARREN, Dr. —, and Mr. —.	<i>Eleven hours weekly.</i>	44
Study of bones and joints, with recitations.	<i>Three hours a day, five times a week (mornings).</i>	60
Study of cells and embryos.	<i>Three hours a day, five times a week.</i>	60
Written tests.	<i>One hour, Saturdays.</i>	4

March

Lectures. Assistant Professor WARREN, Dr. GREEN, and —.	<i>Seven or eight hours a week.</i>	28-32
Demonstrations. Assistant Professor WARREN.	<i>Four times a week (mornings).</i>	16
Practical Anatomy, with recitations.	<i>Three hours a day, five times a week (mornings).</i>	60
Study of Embryology and Histology.	<i>Three hours a day, five days a week.</i>	60
Written tests.	<i>One hour, Saturdays.</i>	4

April

Lectures and demonstrations. Drs. — and GREEN.	<i>Two to three hours a day, six days a week.</i>	88-104
Practical anatomy with recitations.	<i>Two to three hours a day, five times a week (afternoons).</i>	80-120
Written tests.		

May

Lectures and demonstration.	Dr. THOMA.	<i>Five times a week.</i>	20
Laboratory exercises.	Study of anatomy, histology, embryology of the oral cavity and teeth.		
		<i>Five times a week (afternoons).</i>	60
Written tests.			

PATHOLOGY

FRANK B. MALLORY, M.D., *Associate Professor of Pathology.*

The course consists of lectures and laboratory exercises occupying the mornings of the month of May. The general principles of pathology, including inflammation and repair, retrograde processes, certain special infectious agents and tumors, will be presented first. The special pathology of the teeth and adjoining structures will be considered and the nature of the lesions involving these organs will be explained in the light of the general principles already studied.

Laboratory exercises.	Associate Professor MALLORY.	<i>Three hours daily, for four weeks.</i>	72
Lectures.	Associate Professor MALLORY.	<i>Daily, for four weeks.</i>	24

PHYSIOLOGY

WALTER B. CANNON, M.D., *George Higginson Professor of Physiology.*

ERNEST G. MARTIN, Ph.D., *Assistant Professor of Physiology.*

PERCY G. STILES, Ph.D., *Instructor in Physiology.*

WALTER L. MENDENHALL, M.D., *Teaching Fellow in Physiology.*

McKEEN CATTELL, S.B., *Teaching Fellow in Physiology.*

REGINALD FITZ, M.D., *Fellow in Physiology.*

ALEXANDER FORBES, M.D., *Instructor in Physiology.*

FRANK A. HARTMAN, Ph.D., M.D., *Austin Teaching Fellow in Physiology.*

The instruction in Physiology is based, as far as possible, on observations made by the students in laboratory experiments. The experiments are selected to impress the student with the methods and the most important facts in the various divisions of the subject. Physiological processes not readily observed in the laboratory the student learns with an insight derived from practical experience in experimentation. The arrangement of the experiments is in general such that the student first learns of what activity an organ or tissue is capable, next how certain factors condition or modify that activity, and finally what may be the effect of the activity. The experiments have also been so arranged as to place those with more general bearing first, and those with special interest later. Thus reference to previously acquired information becomes more and more possible as the course proceeds.

The amount of time devoted to laboratory exercises is approximately one hundred and sixty hours. Each student is required to preserve a record of his experiments and observations in a laboratory note-book. These records are examined and criticised from day to day.

Observations of his own experiments by the student are supplemented by more than thirty special demonstrations. These exercises, some of which are performed by students under the direction of an assistant, are closely correlated with the other objective instruction. The function of the depressor nerve, motor localization in the cerebral cortex, the action of secretin and of enterokinase, and the effects of lymphagogues are examples of subjects which are demonstrated.

The facts observed in the laboratory and in the demonstrations are discussed in lectures. The lectures, about ninety in number, are informal discussions permitting questions by the students or by the instructor. In these discussions the laboratory experiments are correlated with one another and with the body of physiological knowledge.

In order that students shall review the work repeatedly as the course proceeds, and also that the instructors may judge the efficiency of the teaching, the class is divided into sections and quizzed orally every week by the instructing staff. At the end of each general division of the subject, as, for example, the nervous system, or the circulation, a written test is given. Usually five questions are asked; as examples the following are illustrative: What are the effects of stimulating the vasoconstrictor nerves of any particular organ? Cite morphological and physiological evidence for segmental arrangement of the nervous system. Discuss cortical localization. The examination books are returned, corrected, to the students.

If in the quizzes and tests many students show that certain points are not clearly understood, these points are briefly discussed again before the class. If a student reveals by his answers general failure to grasp the subject intelligently, he is personally conferred with regarding the character of his work. Such conferences are held after the first six weeks of the course, and usually result in a better understanding between the instructor and the student, and frequently in a marked improvement in the student's efforts.

Text-books.—No special text-book is required, but the following books are recommended for reading in connection with the course: Text-book of Physiology, edited by E. A. Schäfer. Howell, Text-book of Physiology. Stewart, Manual of Physiology. Tigerstedt, Text-book of Physiology. Hermann, Lehrbuch der Physiologie. Nagel, Handbuch der Physiologie.

<i>November, December, January</i>	HOURS
Laboratory experiments. Professor CANNON, Asst. Professor MARTIN, and Dr. PORTER. <i>Daily.</i>	160
Quizzes (14). <i>One hour Saturdays.</i>	14
Written tests (5). <i>One hour Mondays.</i>	5
Lectures (90). Professors CANNON and MARTIN.	90
Special demonstrations (30). Professors CANNON and MARTIN.	15

INVESTIGATION

Any student, properly qualified, who desires to engage in physiological research will be welcomed into the laboratory and will be offered every facility for research which the laboratory affords.

COMPARATIVE PHYSIOLOGY

WILLIAM T. PORTER, M.D., LL.D., *Professor of Comparative Physiology.*

GRADUATE COURSES

I. *Physiological Research.* Students qualified for research will pursue their investigations under the immediate direction of the Professor in charge.

II. *Comparative Physiology of Muscle.* Professor PORTER. Three hours weekly during February and March.

III. *Physiological Conference.* Professor PORTER. Demonstrations with informal discussions of selected problems in physiology. Mondays and Thursdays, 5 to 6 P.M., throughout the year.

BACTERIOLOGY

HAROLD C. ERNST, M.D., *Professor of Bacteriology.*

S. BURT WOLBACH, M.D., *Assistant Professor of Bacteriology.*

CALVIN G. PAGE, M.D., *Instructor in Bacteriology.*

ALBERT E. STEELE, M.D., *Instructor in Bacteriology.*

CLEAVELAND FLOYD, M.D., *Instructor in Bacteriology.*

HENRY J. PERRY, M.D., *Assistant in Bacteriology.*

HORACE K. BOUTWELL, M.D., *Assistant in Bacteriology.*

LESLEY H. SPOONER, M.D., *Assistant in Bacteriology.*

JAMES A. HONEIJ, M.D., *Fellow in Bacteriology.*

JOHN W. HAMMOND, M.D., *Fellow in Bacteriology.*

RICHARD S. AUSTIN, M.D., *Austin Teaching Fellow in Bacteriology.*

Required bacteriology is taught by lectures and practical laboratory work. The lectures treat of the general subject and of methods of practical work. In the laboratory each student has an opportunity to become familiar with the simpler methods of manipulation and staining which are of especial clinical value, and with the more prominent of the pathogenic bacteria.

Lectures. Professor ERNST. *Daily, except Saturdays, during October and November.*

Laboratory work. Professor ERNST, and Drs. STEELE, PAGE, PERRY, BOUTWELL, SPOONER, AUSTIN, AND FLOYD. *Two to three hours daily during October and November.* 120

OPERATIVE DENTISTRY

EUGENE H. SMITH, D.M.D., *Professor of Clinical Dentistry and Orthodontia.*

WILLIAM H. POTTER, D.M.D., *Professor of Operative Dentistry.*

TIMOTHY O. LOVELAND, D.M.D., *Instructor in Operative Dentistry.*

ALBERT B. JEWELL, D.M.D., *Instructor in Operative Dentistry.*

FORREST G. EDDY, D.M.D., *Instructor in Operative Dentistry.*

FRANK PERRIN, D.M.D., *Instructor in Operative Dentistry.*

EDWIN C. BLAISDELL, D.M.D., *Instructor in Operative Dentistry.*

JAMES SHEPHERD, D.M.D., *Instructor in Operative Dentistry.*

THOMAS W. WOOD, D.M.D., *Instructor in Operative Dentistry.*

BENJAMIN H. CODMAN, D.M.D., *Instructor in Operative Dentistry.*

FRANK T. TAYLOR, D.M.D., *Instructor in Operative Dentistry.*

JOSEPH T. PAUL, D.M.D., *Instructor in Operative Dentistry.*

HARRY S. PARSONS, D.M.D., *Instructor in Operative Dentistry.*

EDWARD M. QUINBY, M.R.C.S., L.R.C.P., D.M.D., *Instructor in Operative Dentistry.*

JAMES A. FURFEY, D.M.D., *Instructor in Operative Dentistry.*

ASHER H. ST. C. CHASE, D.M.D., *Instructor in Operative Dentistry.*

CHARLES E. PARKHURST, D.M.D., *Instructor in Operative Dentistry.*

CLARENCE B. VAUGHAN, D.M.D., *Instructor in Operative Dentistry.*

CHARLES B. BURNHAM, D.M.D., *Assistant in Operative Dentistry.*

JOHN T. TIMLIN, D.M.D., *Assistant in Operative Dentistry.*

ERNEST E. CARLE, D.M.D., *Instructor in Operative Dentistry.*

ARTHUR A. LIBBY, D.M.D., *Instructor in Operative Dentistry.*

EDWARD P. WHITE, D.M.D., *Assistant in Operative Dentistry.*

DAVID F. SPINNEY, D.M.D., *Instructor in Operative Dentistry.*

CHARLES A. JAMESON, D.M.D., *Assistant in Operative Dentistry.*

ALBERT I. MACKINTOSH, D.M.D., *Instructor in Operative Dentistry.*

CHARLES W. MCPHERSON, D.M.D., *Instructor in Operative Dentistry.*

LESLIE H. NAYLOR, D.M.D., *Instructor in Operative Dentistry.*

SAMUEL T. ELLIOTT, D.M.D., *Instructor in Operative Dentistry.*

WALTER A. DAVIS, D.M.D., *Instructor in Operative Dentistry.*

CHARLES G. PIKE, D.M.D., *Instructor in Operative Dentistry.*

ARTHUR T. FREEMAN, D.M.D., *Instructor in Operative Dentistry.*

MARTIN B. DILL, D.M.D., *Lecturer on Operative Dentistry.*

HARRY A. STONE, D.M.D., *Instructor in Operative Dentistry.*

RAYMOND B. CARTER, D.M.D., *Assistant in Operative Dentistry.*

- NATHAN A. ESTES, D.M.D., *Instructor in Operative Dentistry.*
 LEON J. LAWTON, D.M.D., *Assistant in Operative Dentistry.*
 BENJAMIN TISHLER, D.M.D., *Instructor in Operative Dentistry.*
 EUGENE B. WYMAN, D.M.D., *Instructor in Operative Dentistry.*
 ROBERT S. CATHERON, D.M.D., *Instructor in Operative Dentistry.*
 PHILIP A. LEAVITT, D.M.D., *Instructor in Operative Dentistry.*
 J. WILLIAM O'CONNELL, D.M.D., *Lecturer on Materia Medica and Instructor in Operative Dentistry.*
 CHARLES E. STEVENS, D.M.D., *Instructor in Operative Dentistry.*
 ARTHUR S. CROWLEY, D.M.D., *Assistant in Operative Dentistry.*
 EDWARD H. LOOMER, D.M.D., *Assistant in Operative Dentistry.*
 JUDSON C. SLACK, D.M.D., *Assistant in Operative Dentistry.*
 ERNEST V. L. WHITCHURCH, D.M.D., *Instructor in Operative Dentistry.*
 CARL E. SAFFORD, D.M.D., *Instructor in Operative Dentistry.*
 WILLIAM F. DREA, D.M.D., *Instructor in Operative Dentistry.*
 CHARLES S. EMERSON, D.M.D., *Instructor in Operative Dentistry.*
 WILLIAM G. JEWETT, D.M.D., *Assistant in Operative Dentistry.*
 LAWRENCE E. MCGOURTY, D.M.D., *Assistant in Operative Dentistry.*
 HENRY J. SKINNER, D.M.D., *Assistant in Operative Dentistry.*
 CHESTER F. WOLFE, D.M.D., *Assistant in Operative Dentistry.*
 WILLIAM W. ANTHONY, D.M.D., *Assistant in Operative Dentistry.*
 MERTON W. FOSS, D.M.D., *Assistant in Operative Dentistry.*
 EDWARD M. GUTHRIE, D.M.D., *Assistant in Operative Dentistry.*
 CHARLES W. RINGER, D.M.D., *Assistant in Operative Dentistry.*
 TULLIO N. BELLO, D.M.D., *Assistant in Operative Dentistry.*

The instruction in this department is systematically distributed over the second and third years. In the second year there is one lecture each week. These lectures deal first with the elemental principles of operative dentistry and then with the application of these principles to the simpler forms of operative work. Practical work is carried on six mornings in the week during the year. The student is first required to arrange extracted teeth in a metal model which imitates the shape of the jaws. Upon teeth thus mounted a variety of operations is performed. Thus familiarity with instruments, and ability in their use is developed. When a student has acquired operative ability by work upon the model, he is given patients. Upon these patients he performs at first the simpler operations, then the more difficult ones. In the course of the year all the ordinary operations are performed.

In the third year there is one lecture each week. These lectures deal with advanced processes in operative dentistry. They are arranged so as to be a natural continuation of the lectures of the second year. Practical work is carried on five afternoons in the week, and students are required

to satisfactorily perform all the accredited operations belonging to the practice of dentistry.

Clinical Lectures on Operative Dentistry.—These exercises are intended to demonstrate the individual methods of the lecturers. They include brief lectures, the exhibition of models, and practical operations upon patients.

Text-books.—Black, Operative Dentistry. American Text-Book of Operative Dentistry. American System of Dentistry. Marshall, Oral Surgery. Marshall, Operative Dentistry. Johnson, Text-Book of Operative Dentistry. Hewitt, Anaesthetics and Their Administration. Thoma, Oral Anaesthesia.

Lectures. Professor POTTER. *Once a week throughout the third year.* 30
Dr. DILL. *Once a week throughout the second year.* 30

Practical work. Drs. LOVELAND, JEWELL, EDDY, PERRIN, BLAISDELL, SHEPHERD, WOOD, CODMAN, TAYLOR, PAUL, PARSONS, QUINBY, FURFEY, CHASE, PARKHURST, VAUGHAN, BURNHAM, TIMLIN, CARLE, LIBBY, JAMESON, SPINNEY, WHITE, MACKINTOSH, MCPHERSON, NAYLOR, ELLIOTT, DAVIS, PIKE, FREEMAN, STONE, CARTER, ESTES, LAWTON, TISHLER, WYMAN, CATHERON, LEAVITT, O'CONNELL, STEVENS, CROWLEY, LOOMER, SLACK, WHITCHURCH, SAFFORD, DREA, EMERSON, JEWETT, MCGOURTY, SKINNER.

Fifteen hours a week, throughout the second and third years. 960

Massachusetts General Hospital, Out-Patient Department.—Operative Clinic. *Three hours each day throughout the year.* Drs. SKINNER, WOLFE, GUTHRIE, BELLO, ANTHONY, RINGER.

PROPHYLAXIS AND PYORRHOEA ALVEOLARIS

NED A. STANLEY, D.M.D., *Instructor in Operative Dentistry.*

Pyorrhoea Alveolaris receives special attention. The etiology of the disease and its systemic treatment are considered in the lectures, and an operative course in instrumentation is given to the class in sections. Clinics. *Three hours each week throughout the year.* 96

X-RAY DEPARTMENT.—DWIGHT M. CLAPP FOUNDATION

EARLE C. CUMMINGS, D.M.D., *Instructor in Roentgenology.*

A course of six or more lectures on Roentgenology supplemented by clinical demonstrations.

It is aimed to touch briefly upon the subject in general, while giving special attention to the use of the X-ray in Dentistry. The interpretation of Dental radiographs is taken up in detail, and the value of the X-ray as a diagnostic agent is dwelt upon and illustrated with practical cases.

Collateral Reading. — Journal of American Roentgen-Society. Kassabrau's Electro-Therapeutic and Roentgen Rays. Raper's Dental Radiography.

Lectures. DR. CUMMINGS. *Once a week for six weeks.*

EXTRACTION AND ANAESTHESIA

WILLIAM H. POTTER, D.M.D., *Professor of Operative Dentistry.*
 EDWIN L. FARRINGTON, D.M.D., *Instructor in Extracting and Anaesthesia.*
 OLIVER P. WOLFE, D.M.D., *Instructor in Extracting and Anaesthesia.*
 ALBERT L. MIDGLEY, D.M.D., *Instructor in Extracting and Anaesthesia.*
 HAROLD B. NORWOOD, D.M.D., *Instructor in Extracting and Anaesthesia.*
 ALBERT HERDER, D.M.D., *Assistant in Extracting and Anaesthesia.*
 JOSEPH A. RING, D.M.D., *Instructor in Extracting and Anaesthesia.*

The subject of extraction is treated in the lectures upon operative dentistry by Professor POTTER. This treatment deals first with the anatomy of the roots and the root sockets and then the lines of least resistance along which teeth should be removed from their sockets. The technique of tooth extraction is explained and illustrated upon models.

Anaesthesia as induced by nitrous oxide, nitrous oxide and oxygen, ether and somnoforme is described in lectures which deal with symptoms produced and technique of administration.

Local anaesthesia by the injection of cocaine and novocaine according to the most approved methods is taught.

Practical instruction in extracting and anaesthesia is available to second and third year students every day in the year with the exception of Sundays and holidays. Special attention is given to continuous anaesthesia by the use of nitrous oxide and oxygen, and students have ample opportunity to become familiar with operations under this system.

Extracting Clinics. Professor POTTER, Drs. WOLFE, FARRINGTON, MIDGLEY, NORWOOD, HERDER, and RING. *Two hours a day, throughout the second and third years.* 600

Clinical Demonstrations of Nitrous Oxide and Oxygen Anaesthesia. Professor POTTER. *Once a week throughout the third year.* 64

PROSTHETIC DENTISTRY

- WILLIAM P. COOKE, D.M.D., *Professor of Prosthetic Dentistry.*
 ARTHUR W. ELDERED, D.M.D., *Instructor in Prosthetic Dentistry.*
 THOMAS B. HAYDEN, D.M.D., *Instructor in Prosthetic Dentistry.*
 DENNIS J. HURLEY, D.M.D., *Assistant in Prosthetic Dentistry.*
 WILSON C. DORT, D.M.D., *Instructor in Prosthetic Dentistry.*
 RUFUS HENRY GOULD, D.M.D., *Assistant in Prosthetic Dentistry.*
 FRANK R. McCULLAGH, D.M.D., *Instructor in Prosthetic Dentistry.*
 RUDOLF SYKORA, D.M.D., *Instructor in Prosthetic Dentistry.*
 HENRY GILMAN, D.M.D., *Instructor in Prosthetic Dentistry.*
 HERBERT F. LANGLEY, D.M.D., *Instructor in Prosthetic Dentistry.*
 FRANK E. TRAVIS, D.M.D., *Instructor in Prosthetic Dentistry.*
 WILLIAM H. WESTON, D.M.D., *Instructor in Prosthetic Dentistry.*
 HARRY S. CLARK, D.M.D., *Instructor in Prosthetic Dentistry.*
 FRANK LER. EAMES, D.M.D., *Instructor in Prosthetic Dentistry.*
 JULIUS F. HOVESTADT, D.M.D., *Instructor in Prosthetic Dentistry.*
 UBERT C. RUSSELL, D.M.D., *Assistant in Prosthetic Dentistry.*
 VARAZTAD H. KAZANJIAN, D.M.D., *Demonstrator of Prosthetic Dentistry.*
- BLAINE W. MORGAN, D.M.D., *Instructor in Prosthetic Dentistry.*
 WALTER F. PROVAN, D.M.D., *Instructor in Prosthetic Dentistry.*
 HORATIO LE S. ANDREWS, D.M.D., *Instructor in Prosthetic Dentistry.*
 FRED A. BECKFORD, D.M.D., *Instructor in Prosthetic Dentistry.*
 MAURICE E. PETERS, D.M.D., *Instructor in Prosthetic Dentistry.*
 WILLIAM F. STRANGMAN, D.M.D., *Instructor in Prosthetic Dentistry.*
 REINHOLD RUELBERG, D.M.D., *Instructor in Prosthetic Dentistry.*
 ERNEST S. CALDER, D.M.D., *Instructor in Prosthetic Dentistry.*
 GUY E. FLAGG, D.M.D., *Instructor in Prosthetic Dentistry.*
 SIMON MYERSON, D.M.D., *Assistant in Prosthetic Dentistry.*
 CLARENCE SHANNON, D.M.D., *Instructor in Prosthetic Dentistry.*
 MARK TISHLER, D.M.D., *Assistant in Prosthetic Dentistry.*
 NELS H. MALMSTROM, D.M.D., *Instructor in Prosthetic Dentistry.*
 FREDERICK J. SULLIVAN, D.M.D., *Instructor in Prosthetic Dentistry.*
 GEORGE A. PEASE, D.M.D., *Assistant in Prosthetic Dentistry.*
 ST. CLAIR A. WODELL, D.M.D., *Instructor in Prosthetic Dentistry.*
 LEON A. STORZ, D.M.D., *Assistant in Prosthetic Dentistry.*
 ADOLPH GAHM, D.M.D., *Assistant in Prosthetic Dentistry.*
 FREDERICK W. HOVESTADT, D.M.D., *Assistant in Prosthetic Dentistry.*
 NISHAN DER S. TASHJIAN, D.M.D., *Assistant in Prosthetic Dentistry.*
 THOMAS J. GIBLIN, JR., D.M.D., *Assistant in Prosthetic Dentistry.*
 RALPH E. GOVE, D.M.D., *Assistant in Prosthetic Dentistry.*
 ALLAN W. LORD, D.M.D., *Assistant in Prosthetic Dentistry.*

Lectures and demonstrations to the second and third class in sections, followed by practical work in the laboratory: the manner in which mineral teeth are constructed, the principles and method of carving and furnace-work, and all compounds used for artificial teeth; and the manner in which gold and silver plates are prepared and adapted to the mouth; the use of rubber and other articles as bases. It is the aim to teach not only the mere mechanical processes of Dentistry, but that combination of art with mechanism which enables the practitioner to effect so much in restoring the symmetry of the face and usefulness of the teeth, where they have been lost or impaired by accident or disease.

Lectures. Demonstrator KAZANJIAN. *Once a week throughout the third year.*

Lectures. Instructor BECKFORD. *Once a week throughout the second year.*

Practical work. Drs. ELDRED, HAYDEN, HURLEY, DORT, GOULD, McCULLAGH, SYKORA, GILMAN, LANGLEY, TRAVIS, WESTON, CLARK, EAMES, RUSSELL, KAZANJIAN, MORGAN, PROVAN, BECKFORD, STRANGMAN, CALDER, FLAGG, MYERSON, SHANNON, MALMSTROM, SULLIVAN, PEASE, WODELL, STORZ, GAHM, TASHJIAN, GIBLIN, Jr., GOVE, LORD. *Eighteen hours a week throughout the second and third years.* 1080

CROWN AND BRIDGE WORK

Lectures and Demonstrations. Professor COOKE. *Once a week throughout the second and third years.* 30

Demonstrations. Drs. HOVESTADT, ANDREWS, PETERS, RUELBERG, M. TISHLER, and F. W. HOVESTADT. *Three hours each week.* 90

Text-books. — Wilson, Dental Prosthesis. Richardson, Mechanical Dentistry. Turner's Prosthetic Dentistry. Kingsley, Oral Deformities. Harris, Principles and Practice. Harris, Dictionary of Dentistry. Evans, Crown and Bridge Work. Goslee, Principles and Practice of Crowning Teeth.

ORTHODONTIA

EUGENE H. SMITH, D.M.D., *Professor of Clinical Dentistry and Orthodontia.*

LAWRENCE W. BAKER, D.M.D., *Assistant Professor of Orthodontia.*

ADELBERT FERNALD, D.M.D., *Instructor in Orthodontia.*

HORACE L. HOWE, D.M.D., *Instructor in Orthodontia.*

WALTER C. MINER, D.M.D., *Instructor in Orthodontia.*

Orthodontia is taught by lectures and by practical work in the Infirmary. During the second half of the second year there are lectures and demon-

strations and the students are made familiar with the principles of normal occlusion and the various apparatus for the correction of irregularities. In the third year the diagnosis and treatment of the various forms of malocclusions and the etiology are taught by lectures and recitations. Each senior student is obliged to take not less than two cases of irregularities and carry them to completion under the direction of the professor in charge and his associates. On Tuesday and Friday afternoons conferences are held on the cases under treatment.

Text-books.—Angle, Treatment of Malocclusion of the Teeth and Fractures of the Maxillae. Farrar, Irregularities of the Teeth. Talbot, Irregularities. Guilford, Orthodontia. Case, Dental Orthopedia.

Lectures. Professor SMITH. *Once a week throughout the third year.* 30
Lectures. Asst. Professor BAKER. *Once a week for six weeks during the second half of second year.* 6

Clinics. Drs. BAKER, HOWE, FERNALD, and MINER. *Seven hours a week throughout October and November. Four hours a week throughout balance of year.* 147

PORCELAIN WORK

AMOS I. HADLEY, D.M.D., *Instructor in Porcelain Work.*

ARTHUR J. OLDHAM, D.M.D., *Instructor in Porcelain Work.*

NORMAN B. NESBETT, D.M.D., *Instructor in Porcelain Work.*

CHARLES T. WARNER, D.M.D., *Instructor in Porcelain Work.*

Demonstrations in gold and porcelain inlay work in the prosthetic laboratory and infirmary.

Text-books.—Byram, Principles and Practice of Filling Teeth with Porcelain. Bruck, The Filling of Teeth with Porcelain. Peck, Porcelain Inlays.

Clinics. Drs. HADLEY, OLDHAM, and NESBETT. *Three hours a week throughout the third year.* 174

Clinics. Drs. HADLEY and WARNER. *Three hours a week for eighteen weeks during the second year.* 174

SYPHILIS

C. MORTON SMITH, M.D., *Instructor in Syphilis.*

The course consists of lectures and clinical instruction given in the Dermatological Clinic of the Boston Dispensary where there is a very large proportion of syphilitics. Each student is given ample opportunity to see all of the common and many of the rarer manifestations of syphilis in the mouth and throat, as well as non-syphilitic conditions that may be misleading.

Other manifestations of the disease are shown when of practical value or interest to the students.

Lectures and Clinical Instruction. *Throughout December and January during the third year.*

SURGERY, SURGICAL PATHOLOGY, AND ORAL SURGERY

GEORGE H. MONKS, M.D., M.R.C.S., *Professor of Oral Surgery.*

LEROY M. S. MINER, D.M.D., M.D., *Assistant Professor of Oral Surgery.*

JOHN BAPST BLAKE, M.D., *Instructor in Surgery.*

ROGER B. TAFT, D.M.D., *Instructor in Oral Surgery.*

Lectures embracing the general subjects of inflammation, suppuration, ulceration, gangrene, necrosis, erysipelas, septicemia, pyemia, shock, repair, etc.; and special subjects which more particularly concern Oral Surgery. These lectures will be illustrated, so far as possible, by diagrams, by demonstrations of pathological specimens, and by exhibition of clinical cases at the Boston City Hospital and by weekly clinics in the Surgical Department at the Dental School. Instruction will be given in the use of anaesthetics.

Text-books.—Da Costa's Modern Surgery. Brewer's Surgery. Warren, Surgical Pathology.

Lectures. Professor MONKS. *Once a week for twenty-four weeks.* 24

Clinics. Professor MONKS, Asst. Professor MINER, and Dr. TAFT. *Once a week, throughout the year.* 96

Clinics. Asst. Professor MINER and Dr. TAFT. *Once a week, throughout the year.* 64

Clinics. Dr. BLAKE. *Once a week for two months, at the Boston City Hospital.* 8 or 9

OPERATIVE SURGERY

Operations are performed before students one day each week throughout the year in the Amphitheatres at the Massachusetts General Hospital and the Boston City Hospital.

ORAL HYGIENE

GEORGE H. WRIGHT, D.M.D., *Lecturer on Oral Hygiene.*

Clinical Instruction during the third year. *Massachusetts General Hospital.*

DENTAL PATHOLOGY

CHARLES A. BRACKETT, D.M.D., *Professor of Dental Pathology*

In the beginning of the course of lectures the general principles of Pathology, including Etiology, Nosology, Semeiology, Diagnosis, and Prognosis, are outlined. The various pathological conditions in their relations to one another and their modifications of structure and function are taught. This prepares the way for the special pathology of the region with which the dentist has most to do. The diseases of the dental and contiguous tissues are considered in detail, with reference to their nature, causes, manifestations and terminations, and their relations with systemic conditions. The lectures will be supplemented with clinical demonstrations of pathological conditions.

Text-books. — Burchard, Inglis, Dental Pathology and Therapeutics. Miller, Micro-organisms of the Human Mouth.

Collateral Reading. — Barrett, Oral Pathology and Practice. McFarland, Text-book of Pathology. Warren, Surgical Pathology and Therapeutics.

Lectures. PROFESSOR BRACKETT. *Once a week, throughout the second year.* 30

MATERIA MEDICA AND THERAPEUTICS

EDWARD C. BRIGGS, M.D., D.M.D., *Professor of Dental Materia Medica and Therapeutics.*

J. WILLIAM O'CONNELL, D.M.D., *Lecturer on Materia Medica and Instructor in Operative Dentistry.*

Lectures, recitations, and demonstrations of crude drugs and their preparations. This is a complete course, as taught in the Medical School to medical students. Remedies are classified, however, to meet the special requirements of the dental practitioner, and the student is particularly instructed upon those remedies which, as a specialist, he will be called upon most to use.

Text-books. — Potter, Materia Medica, Pharmacy, and Therapeutics. Wood, Therapeutics, Materia Medica, and Toxicology. Butler, Materia Medica, Pharmacology, and Therapeutics. Prinz, Materia Medica and Therapeutics. Buckley, Materia Medica and Therapeutics.

Collateral Reading. — Hare, Practical Therapeutics. Thompson, Dietetics.

Lectures. PROFESSOR BRIGGS. *Once a week for ten weeks during the third year.* 10

Lectures and Conferences. DR. O'CONNELL. *Once a week throughout the second year.* 24

NEUROLOGY

EDWARD W. TAYLOR, M.D., *Instructor in Neurology.*

A course of four lectures on Neurology will include a brief review of the anatomy and physiology of the nervous system, the anatomy of the trifacial nerve being made the subject of special study.

The nervous disturbances liable to be set up by dental irritation, and, conversely, those likely to produce odontalgia, will be considered as fully as the limited nature of the course permits, special attention being paid to trifacial neuralgia. The relation of certain functional disorders to the work of the dentist will also be considered.

Lectures. DR. TAYLOR. *Once a week for four weeks.*

4

CLINICAL ADVANTAGES

The Dental School is established in Boston in order to secure those advantages for Clinical Instruction which are found only in large cities.

The clinics of the Dental Hospital afford a sufficient number of patients to give each student abundant practice in all branches of Dentistry.

Each student is assigned a chair in the Operative Infirmary and is required to operate three hours a day, five days each week, giving him during each year 480 hours of practice.

Each student is assigned a bench in the Prosthetic Laboratory and is required to work at the bench or in the Prosthetic Infirmary three hours a day for six days each week, giving him 576 hours of practice each year.

DENTAL STATISTICS FOR 1913-14

Operative Department:—

No. of patients treated	4,438
“ “ “ for diseases of the teeth	
“ “ “ and gums	6,071
“ “ “ for pyorrhoea alveolaris	164
“ sets of teeth cleaned	1,823
“ operations	17,554
No. of fillings—gold	2,155
“ “ amalgam	2,089
No. of fillings—cement	1,758
“ “ gutta percha	90
“ “ silicate	1,135
“ “ amalgam and cement	2,269

Surgical cases :—

Alveolar abscess from infected teeth	35
“ “ “ imbedded roots	6
“ “ following fracture	7
Absorption	1
Antrum empyema	3
Angioma	1
Amputation of root	4
Carcinoma	2
Cervical Adenitis	1
Cysts	2
Epulis	7
Excision of frenum	3
Fracture of jaw	8
Facial paralysis	1
Fibroma of hard palate	1
Imbedded teeth and roots	38
Gangrenous pulp	1
Necrosis of jaw	1
Odontoma	2
Removal of cicatrix	1
Papilloma	1
Pericementitis	1
Ranula	1
Sebaceous cyst	1
Trifacial neuralgia	4
Roentgen Ray.	
No. of radiographs	546
Inlay work.— Service to patients.	
No. of porcelain inlays and tips	24
“ gold inlays	31
Inlay work.— Practice work.	
No. of porcelain inlays	94
“ gold inlays	25
“ silver inlays	24
Prosthetic Department.— Service to patients.	
No. of sets of artificial teeth	148
“ “ “ “ repaired	153
“ partial sets of artificial teeth	148
“ artificial palates	6
“ “ noses	1
“ nasal restorations	1
“ max. prothesis	2

Prosthetic Laboratory. — Practice work.	
No. of specimen plates	541
Fractured Jaws. — Service to patients.	
No. of cases treated	21
“ appliances	21
Fractured Jaws. — Practice Work.	
No. of appliances	108
Orthodontia. — Service to patients.	
No. of patients treated for irregularities of the teeth	109
“ appliances	228
“ articulated models of regulating cases .	218
Orthodontia. — Practice work.	
No. of articulated models of regulating cases .	54
“ regulating appliances	108
Crown and Bridge Work. — Service to patients.	
No. of crowns and caps	278
“ “ repaired	55
“ pieces of bridge work	137
“ pieces of bridge work repaired	60
Crown and Bridge Work. — Practice work.	
No. of crowns and caps	496
“ bridges	110

The Massachusetts General Hospital. — During the past year, six thousand two hundred and fifty-one patients were treated in the wards, five thousand four hundred and twenty-four cases were treated in the accident ward, and there were one hundred forty-seven thousand four hundred and twenty-eight visits to the out-patient departments. Patients are received from all parts of the United States and the Provinces, and are visited by the students, with the attending physicians and surgeons, or demonstrated in the amphitheatres. Operations are numerous, and are performed in the amphitheatre. Clinics in the following special branches have been established in connection with the out-patient department: Dermatology, Laryngology, Diseases of the Nervous System, Children's Diseases, Orthopedics, Diseases of the Genito-Urinary System, and Syphilis.

The Boston City Hospital. — During the past year, eighteen thousand and seventy-seven cases were treated in its wards, and there were two hundred and eight thousand one hundred and ninety-seven visits in its various out-patient departments. The medical wards always contain many cases of acute diseases, and changes are taking place constantly. The opportunities for seeing fractures, injuries, and traumatic cases of all kinds are excellent, since, on an average, forty-nine thousand street accidents are

treated yearly. Surgical operations are performed in the amphitheatre. There are special services for diseases of women, of the eye, the ear, the skin, and the nose and throat. Diseases of women and of the nervous system are also largely treated in the out-patient department. Clinical instruction is given by the physicians and surgeons two or more times a week.

In this hospital, the facilities for witnessing Operative Surgery are unsurpassed. Twice a week operations are performed in the presence of the class. The number of these operations is large, reaching over four thousand nine hundred a year. The variety is great, embracing every surgical disease and injury, including the surgical operations on the eye and ear.

The Boston Dispensary.—About one hundred and ten thousand visits were made by out-patients at this charity during the past year. Students have ample and excellent opportunity for seeing practical work in the diagnosis and treatment of cases illustrating the various branches of Medicine and Surgery.

The Massachusetts Charitable Eye and Ear Infirmary.—Over sixty-one thousand visits were made by patients at this institution during the past year. These cases present every variety of disease of the ear and eye, and supply a large number of operations. A new and enlarged hospital, considered to be one of the best of its kind in the world, has been erected on land adjoining the Massachusetts General Hospital. It is believed that this building will provide adequately for the proper treatment of the constantly increasing number of patients.

LIBRARIES AND MUSEUMS

The College Library at Cambridge is open to students, and also the Library of the Boston Medical Library Association, which has a dental section containing a large and very complete collection of dental literature. It includes the libraries of the American Academy of Dental Science and the Massachusetts Dental Society. There is a good reference library of modern books, including encyclopaedias, systems, etc. The Library is open daily, except Sundays and holidays, from 9 A.M. to 6 P.M. It is also open Tuesday and Friday evenings from 7 to 10, except during July and August.

The Dental School Library for reference only also contains about 2,885 well selected volumes to which the students and graduates of the School have free access.

The Boston Public Library is open to students who are inhabitants of Boston. Students, not inhabitants of Boston, who have filed a bond at the Bursar's office, or deposited with the Bursar the sum of fifty dollars, may also use this Library.

The Boston Medical Library, No. 8 The Fenway, contains about 82,000 bound volumes and 56,000 pamphlets, and nearly 650 current periodicals are on file. This very valuable Library is open to those who desire to consult medical literature, on week days from 9.30 A.M. to 10 P.M., on Saturdays till 6 P.M.

The Dental Museum is in charge of Dr. WALDO ELIAS BOARDMAN, *Curator*. It contains over 3500 specimens, and offers unusual facilities for study of the teeth. The pathological anatomy of the teeth is shown by more than 2000 specimens, among which are over 200 dissected teeth showing formations of secondary dentine in the pulp cavity, and also many other rare specimens of great value. There are 700 other specimens of human and comparative anatomy, illustrating a wide range of knowledge.

FELLOWSHIPS AND SCHOLARSHIPS

THE ROBERT T. MOFFATT FUND. Dr. ROBERT T. MOFFATT, Class of 1895, has placed at the disposal of the Dean and Administrative Board the sum of five hundred dollars. One hundred dollars is available each year for five years to aid one or more worthy students. Application for this aid may be made to the Dean.

THE FREDERICK SHELDON FUND FOR TRAVELLING FELLOWSHIPS; the University received in 1909 the sum of three hundred and forty six thousand four hundred and fifty-eight dollars and seventy cents from the residuary bequest of Mrs. AMEY RICHMOND SHELDON, and in 1910 the further sum of eight thousand seven hundred and fifty dollars from the same bequest, to establish, in memory of Mrs. Sheldon's husband, a member of the Class of 1842, the FREDERICK SHELDON FUND, "the income thereof to be applied in the discretion of and under rules to be prescribed by the President and Fellows . . . to the further education of students of promise and standing in the University by providing them with facilities for further education by travel after graduation or by establishing travelling scholarships." The income of this fund is at present about fifteen thousand dollars.

By a vote of the President and Fellows, a Committee of seven persons has been appointed to administer the Frederick Sheldon Fund for travelling scholarships. The income is not to be assigned in scholarships of fixed amounts, but "on recommendation to the Committee from the various Departments and Schools, to be assigned as the Committee shall deem most expedient for purposes of investigation or study either in this country—outside Harvard University—or abroad."

The Committee consists of the Deans of the Faculty of Arts and Sciences, the Graduate School of Arts and Sciences, the Graduate Schools

of Applied Science, the Graduate School of Business Administration, the Divinity School, the Law School, and the Medical School.

Application in behalf of a student in any School, Division, or Department of the University must be made through the Dean or Chairman of that School, Division, or Department, to the Chairman of the Committee, Dean L. B. R. BRIGGS, and may be made at any time.

THE CHARLES ELLIOTT PERKINS SCHOLARSHIPS; three undergraduate scholarships and one graduate scholarship, with an income of three hundred dollars each. In 1909, thirty thousand dollars was received from Mrs. CHARLES ELLIOTT PERKINS, of Burlington, Iowa, "in trust for the establishment of scholarships in Harvard University for students from Iowa, the scholarships to be forever known and designated as the 'Charles Elliott Perkins Scholarships.'

" . . . It is my desire that the benefits of this foundation shall be open to those desiring a so-called classical or liberal education, and to those desiring to fit themselves for the professions; and especially that young men who intend to pursue technical studies in preparation for a career in business or engineering may be encouraged by these scholarships to precede their technical studies, or combine them, with such liberal studies as shall contribute to their breadth of view, sympathy with all humane interests, and capacity for ultimate leadership. In fulfilment of the purpose above described, I desire the income of the fund to be divided among four or more scholarships, in accordance with the following terms:—

"I. One undergraduate scholarship of at least \$300, to be offered annually to bona fide residents of Des Moines County upon graduation from the Burlington High School. . . . If no award is made, or the recipient fails to be admitted, the income is to be added to the principal.

"II. Two undergraduate scholarships of \$300 each, to be offered annually to students from Iowa high schools. . . .

"III. One graduate scholarship of \$300, to be offered each year to a graduate of an Iowa college or university in any of the graduate or professional departments of Harvard University.

"In case the income of the fund should be more than sufficient to pay the stipends above mentioned, the President and Fellows may, at their discretion, add such excess of income to the principal, or increase the amount of the stipends, or create additional scholarships for Iowa students. I hope that if the stipends of the undergraduate scholarships are increased, the maximum stipend will be given to the Burlington Scholarship. . . .

"In making the foregoing statements of my wishes and intentions, I desire to impose as absolute requirements,—

"First. The name of the scholarships.

"Second. The limiting of the recipients to Iowa boys.

"Third. The maintenance of at least one scholarship available only to bona fide residents of Des Moines County graduating from the Burlington High School, or the public school which takes its place.

"I hope that the President and Fellows will be governed in other particulars by my expressed wishes, but, realizing that conditions may change in the future, I impose no further trust than is set out in the preceding paragraph, leaving it to the discretion of the President and Fellows to see to it that the scholarships are assigned in such manner from year to year, and from generation to generation, as shall best serve the interest of the State of Iowa."

THE PRINCETON FELLOWSHIP; with a stipend of four hundred and fifty dollars. From a graduate of Princeton University, to be awarded to a graduate of that University studying in any department of Harvard University.

These scholarships and gratuities are awarded to such men among those applying for and needing assistance as give evidence of having done the best work either in this School or in a preparatory course elsewhere.

Students who have not been able to obtain scholarships often find time and opportunity to do outside work of various kinds in the city.

The Director of Scholarships will aid deserving students in obtaining work. Certain loan funds not enumerated above are at his disposal. Students requiring aid should visit the Director as soon as possible to discuss with him their financial needs. The Director will also act in advisory capacity with the students in any matters not intimately associated with the curriculum.

Blank forms, on which all applications for pecuniary aid must be made, may be obtained of the Director of Scholarships.

THE HARRIET N. LOWELL SOCIETY FOR DENTAL RESEARCH

In 1907, Miss HARRIET N. LOWELL bequeathed to the Harvard Dental School a sum of money, the interest to be applied each year to dental research. In addition to the appointment of a special research worker and a research committee of four men, the Administrative Board formed the Harriet N. Lowell Society for Dental Research. The object of the Society is to interest the students in research. Its president and a majority of its executive committee are students, and meetings are held in the school building. A well-equipped research laboratory is open for the use of the students and teachers who are interested in scientific investigation.

WARREN ANATOMICAL MUSEUM IN THE MEDICAL SCHOOL

The Warren Anatomical Museum was founded in 1847 by JOHN COLLINS WARREN, of the College Class of 1797, Adjunct Professor of Anatomy and Surgery from 1809 to 1815, Hersey Professor of Anatomy and Surgery from 1815 to 1847, Professor *Emeritus* from 1847 to his death in 1856, son to JOHN WARREN, the first Hersey Professor of Anatomy and Surgery. This important Museum is open to students in the School, and its collections are used in demonstration of the lectures. Its Curator is Dr. WILLIAM FISKE WHITNEY.

The collection has about ten thousand specimens, illustrating both normal and pathological anatomy and materia medica. These are placed in the hands of the student at any time during the day, upon application to the Curator.

Besides dissections and serial sections of many bones, the anatomical collection includes many corrosive preparations, plaster and papier maché models of bones, organs, and various parts of the body, and frozen sections.

The pathological collection is being constantly enlarged by the addition of numerous specimens, preserved in their natural colors by Kaiserling's method.

EXAMINATIONS

The final examination in every required subject is held at the close either of the first or of the second term of the school year. The examination, therefore, in every subject occurs once a year, but an opportunity to make up failures in examinations is offered at the opening of the school year. The examination in certain studies of the first year is held at *mid-year* only, and is for those who are members of the School at the time, and for those entitled to apply for the degree, provided they have failed previously in those subjects. The *June examination* is only for those who are members of the School at the time, and for those entitled to apply for the degree. The *September examination* is for conditioned students or for applicants for advanced standing. In some branches a portion of the examination consists of practical work in the laboratory.

The amount of time credited to each examination is as follows:—

First Year.—Anatomy (3 hrs.), Histology and Embryology (3 hrs.), Physiology* (3 hrs.), Dental Chemistry (3 hrs.), Physiological Chemistry* (3 hrs.), General Pathology (3 hrs.).

Second Year.—Dental Pathology (3 hrs.), Materia Medica and Therapeutics (2 hrs.), Operative Dentistry (2 hrs.), Bacteriology* (1 hr.),

* The examinations in these subjects are held at the end of the first half-year.

Clinical Chemistry (2 hrs.), Prosthetic Dentistry and Orthodontia (2 hrs.), Crown and Bridge Work (2 hrs.).

Third Year. — Operative Dentistry (2 hrs.), Applied Therapeutics (2 hrs.), Surgical Pathology and Surgery (3 hrs.), Prosthetic Dentistry (2 hrs.), Orthodontia (2 hrs.), Crown and Bridge Work (2 hrs.). These examinations will include operations upon patients performed during the course.

In addition to the above examinations each student is required : —

To dissect three parts of the body to the satisfaction of the Demonstrators ;

To satisfactorily complete the required specimens of Prosthetic Dentistry for the Junior and Senior years ;

To demonstrate his ability to meet satisfactorily the practical requirements in Operative and Prosthetic Dentistry ;

To successfully carry on the treatment of at least two cases of irregularities of the teeth.

No student may advance with his class until he has passed a satisfactory examination in a majority of the studies already pursued.

No student is admitted to the third-year class in practical Operative and Prosthetic Dentistry until he has shown reasonable proficiency in the work of the second year.

No student may enter the third-year class until he has passed all the required examinations for entrance to the school.

Students who fail in any subject may present themselves in that subject again at the next regular examination. After two failures to pass in any subject, a student must give notice twenty-four hours in advance, at the Dean's office, of his intention to take each subsequent examination in that subject, and pay a charge of three dollars.

STATE BOARD EXAMINATION

Students shall not take a State Board examination in Dentistry previous to the time of the final examinations of their Senior year, without a written permission from the Dean of the Dental School.

DIVISION OF STUDENTS

Students are divided into three classes according to their lines of study and proficiency, and during their Junior and Senior years receive extensive opportunities for clinical instruction and practice.

In order that the time of study may count as a full year, students of all classes must present themselves within the first week of the academic year and register their names with the Dean.

REQUIREMENTS FOR THE DEGREE

The degree of DOCTOR OF DENTAL MEDICINE (*Dentariae Medicinae Doctoris*) may be conferred upon any candidate of adult age, and of good moral character, who has passed *all the required examinations*. He must also give evidence of having studied Medicine or Dentistry in some recognized school three full years, the last continuous year of which must have been spent at this School.

The degree of Doctor of Dental Medicine *cum laude* will be given to candidates who have pursued a complete three years' course in this School and obtained not less than eighty per cent in Practical Operative and Prosthetic Dentistry and an average of eighty per cent or over in all other required examinations.

The course is a graded one of three continuous years. *Graduates* from other reputable Dental Schools whose Course of Instruction consists of three years of nine months each may obtain the degree of Doctor of Dental Medicine by spending one year in the School and passing the required examinations.

The right to take the examinations, as well as the privilege of continuing membership in the School, is conditioned upon regular attendance upon lectures, infirmary practice, and laboratory exercises.

Candidates for the degree are obliged to apply for the same in writing, on blanks furnished at the Dean's office, on or before *May 1* of the year in which they propose to graduate.

INSTRUMENTS

With the exception of extracting instruments, lathes, and vulcanizers, flasks, impression trays, blow-pipes and articulators, each student will be required to furnish his own instruments, and appliances for both laboratory and operating room.

At the beginning of the second half of the first year a few dental instruments are required. At the beginning of the second year a complete list of instruments required for use in both the Operative and Prosthetic Departments is furnished by the School, and each student is required to provide himself with the instruments enumerated upon the lists before beginning his work. The cost of these instruments, including the dental engine, is about one hundred and fifty dollars.

FEES AND EXPENSES

There are no fees for matriculation, for the diploma, for the demonstrators, nor for materials used in the infirmary or prosthetic laboratory. For the first year of a student's membership in the School, the tuition fee is *two hundred dollars*, in two payments of *one hundred and twenty dollars* and *eighty dollars*; for a half-year only, *one hundred and twenty dollars*; for the second and third years, *one hundred and fifty dollars* each, in two payments of *ninety dollars* and *sixty dollars*; and for any subsequent year, *fifty dollars*.

During the first year there are the following additional expenses: Three dollars for each of the two parts required for dissection; three dollars for laboratory materials in Histology; three dollars for physiological material; and a maximum of ten dollars a year for chemical material, in addition to the charge for breakage of glass apparatus. Students are required to deposit with the Bursar* six dollars to cover Anatomy charges, three dollars for Histology, and twenty dollars for Chemistry and Physiology. During the second and third years a deposit of ten dollars is required to cover any loss or breakage of appliances in the infirmary and prosthetic laboratory. The balances of these deposits are returnable at the end of the year on application to the Bursar. In the second year there is a fee of three dollars for Chemistry and a fee of three dollars for Bacteriology.

A deposit of two dollars with the Dean of the Medical School will entitle a student to the use of a locker in the Medical School buildings during the first year.

A student who wishes to rent a microscope of the School can do so upon payment of four to six dollars a half-year.

Special students, admitted at the discretion of the Dean to the courses in Operative and Prosthetic Dentistry for the whole or any portion of the academic year, pay a fee of *fifty dollars* for each course.

The student's general expenses may be reduced, in accordance with his means, to the standard which prevails in other cities. A list of boarding places, at various prices, can be obtained at the rooms of the Young Men's Christian Union, No. 48 Boylston Street, Boston.

Students' expenses may also be reduced by occupying rooms in the College dormitories in Cambridge. Information in regard to College rooms may be obtained after March 6 upon application to the Bursar.

At Memorial Hall, Cambridge, the cost of board is expected not to exceed \$5.25 a week.

* The Bursar's office is in Dane Hall, Harvard Square, Cambridge. Hours 9-1.

At Foxcroft Hall, Cambridge, meals are served a la carte, at a cost which averages about \$3.50 a week. Application should be made early to the Auditor, Foxcroft Hall.

Any student who lives in a College room, or boards at Memorial Hall or at Foxcroft Hall, must file a bond in the sum of *four hundred dollars*; or deposit *four hundred dollars* in money or United States Bonds; or deposit fifty dollars as security, pay his tuition-fees in advance as above, pay in advance the full year's rent of any room that may be assigned to him, and make a deposit with the Bursar as security for the payment of his board. In the case of Memorial Hall the deposit for board may be made each week at the rate of \$6.00, or it may be made less frequently in multiples of that figure. In the case of Foxcroft Hall, the deposit, made in sums of \$5.00 or multiples thereof, must be such as to maintain constantly in the Bursar's hands a balance in excess of ten dollars.

STILLMAN INFIRMARY FEE

Not later than October 5 in each academic year, any student may pay to the Bursar the sum of four dollars for the maintenance of the Stillman Infirmary; and, on the order of a physician, every student who has taken advantage of this opportunity will be given, in case of sickness, in return for the fee, a bed in a ward, board, and ordinary nursing for a period not exceeding two weeks in any one academic year.

PAYMENT OF FEES

Each first-year student is required to pay to the Bursar punctually at the beginning of the academic year, without the presentation of a bill, the sum of one hundred and forty-nine dollars; in like manner, each second-year student is required to pay one hundred and three dollars; and each third-year student, one hundred dollars; each student entering any subsequent year is required to pay, in the same manner, fifty dollars. The remainder of the tuition fee—eighty dollars for the first-year students and sixty dollars for the second and third-year students—must be paid to the Bursar on or before January 31. Each student whose dues remain unpaid on the day fixed for their payment is required at once to cease attending lectures and using laboratories or making use of any other privileges as a student until his financial relations with the University have been arranged satisfactorily to the Bursar. Failure to comply with this rule is deemed cause for final separation of the student from the University.

Every student is required to file with the Bursar on his entrance to the School a bond of *fifty dollars*, executed by two sufficient bondsmen

(one of whom must be a citizen of the United States), or to deposit fifty dollars in money, to cover the loss or injury of any property belonging to the University, or for which it is responsible. Blank forms of bonds may be obtained from the Bursar. No officer or student of the University is accepted as a bondsman. Students will be held responsible for the payment of fees until they have notified the Dean, in writing, of their intention to withdraw from the School. *No degree can be conferred until all dues to the School are discharged.*

Whenever a student is obliged to withdraw from the School before the last four weeks of a half-year for no misdemeanor, but for good and sufficient reason, to be determined in all cases by the Administrative Board, it shall be recommended that he be entitled to a remission of three-fourths of the amount due for that portion of the time during which he receives no instruction. This remission will date from the reception by the Dean of a written notice of the student's withdrawal from the School.

Students, on joining the School, and at the beginning of each school year, must enter their names with the Dean of the School. They are expected to register on the first day of the academic year, *the Monday preceding the last Wednesday in September.*

TABULAR VIEW — 1914-15

FIRST YEAR — First Half-Year MEDICAL SCHOOL

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9-10				Mammalian Anatomy. Lecture. <i>Nov., Dec., Jan.</i> Physiology. Lecture.		Chemistry. Lecture. <i>October.</i> Physiology. Lecture. <i>Nov., Dec., Jan.</i>
10-1				<i>October.</i> Mammalian Anatomy. Laboratory. <i>Nov., Dec., Jan.</i> Physiology. Laboratory.		Chemistry. Lab. <i>October.</i> Physiology. Lab. <i>Nov., Dec., Jan.</i>
	PHYSIOLOGICAL AND DENTAL CHEMISTRY.					
2-2.30				Lecture. Daily except Saturday.		
2.30-5				Laboratory. Daily except Saturday.		
	FIRST YEAR — Second Half-Year					
	ANATOMY, HISTOLOGY AND EMBRYOLOGY.					
	<i>February — April</i>		<i>May.</i>			
9 to 1	Daily except Saturday.		Dental Pathology. Daily except Saturday.			
2 to 5	Daily except Saturday. Dissection.		Histology. Teeth and sections of the head. Daily except Saturday.			
			9-1 Prosthetic Dentistry H. D. S. <i>Feb., Mar., April, May.</i>			

TABULAR VIEW—1914-15

October

SECOND YEAR—First Half-Year

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
9	Pract. Oper. Dentistry. Section A. Wyman. Jewett. Stevens. Emerson.	Mat. Medica L. O'Connell. H.M.S. E-221.	Pract. Oper. Dentistry. Section A. Freeman. Tishler. Emerson.	Dent. Path., L. Brackett. H.M.S. E-221.	Op. Dent., L. Dill. H.M.S. E-221.	Pros. Dent. L. Beckford. H.M.S. E-221.
10	Pros. Lab. Section B. Travis. Eldred. Beckford.	Pract. Oper. Dentistry. Section B. O'Connell. Burnham. Emerson.		Pract. Oper. Dentistry. Section B. Chase. Mackintosh. Emerson.	Pract. Oper. Dentistry. Section A. F. T. Taylor. Safford. McPherson. Emerson.	Pros. Lab. Section A. Kazanjian. Dort. Pract. Oper. Dentistry. Section B. Drea. White. Emerson.
to		Pros Lab. Section A. Loomer. Eames. Russell. Beckford.	Pros. Lab. Section B. Strangman. Morgan. Sullivan. Beckford.	Pros. Lab. Section A. Malmstrom. Gilman. Storz. Beckford.	Pros. Lab. Section B. Wodell. Pease. Gove. Beckford.	Extracting and Anaesthesia Ring.
1						
2-3		Bacteriology. Lectures. Daily, except Saturdays. Medical School Building.				
3 to 5½		Bacteriology. Laboratory. Daily, except Saturdays. Medical School Building.				

TABULAR VIEW—1914-15

November

SECOND YEAR—First Half-Year

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
9	Pract. Oper. Dentistry. Section B. Wyman. Jewett. Emerson. Stevens. Pros. Lab. Section A. Travis. Eldred. Beckford.	Mat. Medica L. O'Connell H.M.S. E-221.	Pract. Oper. Dentistry. Section B. Freeman. Emerson. Tishler.	Dent.Path.,L. Brackett. H.M.S. E-221.	Op. Dent.,L. Dill. H.M.S. E-221.	Pros. Dent. L. Beckford. H.M.S. E-221.
10		Pract. Oper. Dentistry. Section A. O'Connell. Carter. Burnham. Emerson.		Pract. Oper. Dentistry. Section A. Chase. Mackintosh. Quinby. Emerson.	Pract. Oper. Dentistry. Section B. F. T. Taylor. Safford. McPherson. Emerson.	Pros. Lab. Section B. Kazanjian. Dort. Pract. Oper. Dentistry. Section A. Drea. White. Emerson.
to		Pros. Lab. Section B. Eames. Loomer. Russell. Beckford.	Pros. Lab. Section A. Morgan. Strangman. Sullivan. Beckford.	Pros. Lab. Section B. Malmstrom. Gilman. Storz. Beckford.	Pros. Lab. Section A. Wodell. Pease. Gove. Beckford.	Extracting and Anaesthesia Ring.
1						
	NOVEMBER.					
2-3		Bacteriology. Lectures. Daily, except Saturdays. Harvard Medical School.				
3 to 5½		Bacteriology. Laboratory. Daily, except Saturdays. Harvard Medical School.				

TABULAR VIEW — 1914-15

December — January

SECOND YEAR — First Half-Year

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
9	Orthodontia. Baker. 6 Lectures Com. Jan. 4.	Mat. Medica L. O'Connell H.M.S. E-221.	Crown and Bridge Work. Clin. Lect. Cooke. H.M.S. A-201.	Dent.Path.,L. Brackett. H.M.S. E-221.	Op. Dent., L. Dill. H.M.S. E-221.	Pros. Dent. L. Beckford. H.M.S. E-221.
10	Pract. Oper. Dentistry. Wyman. Jewett. Stevens. Emerson.	Pract. Oper. Dentistry. Wood. O'Connell. Burnham. Slack. Emerson.	Pract. Oper. Dentistry. Sec. B.—Dec. Sec. A.—Jan. Freeman. Tishler. Emerson.	Pract. Oper. Dentistry. Quinby. Carter. Mackintosh. Emerson.	Pract. Oper. Dentistry. F. T. Taylor. Safford. McPherson. McGourty. Emerson.	Pract. Oper. Dentistry. Sec. B.—Dec. Sec. A.—Jan. White. Perrin. Pros. Lab. Sec. A.—Dec. Sec. B.—Jan. Dort. Kazanjian.
to			Pros. Lab. Sec. A.—Dec. Sec. B.—Jan. Shannon. Giblin, Jr.			Extracting and Anaesthesia Ring.
1						
2	Pros. Dent. Lab. Travis. Eldred. Gahm. Hurley. Beckford.	Pros. Dent. Lab. Eames. Loomer. Russell. Lord. Beckford.	Pros. Dent. Lab. Morgan. Strangman. Sullivan. Beckford.	¹ Pros. Dent. Lab. Malmstrom. Gilman. Storz. Beckford.	Pros. Dent. Lab. Wodell. Pease. Gove. Beckford.	
to				¹ Porcelain Work. Hadley Warner.		
5	Extracting and Anaesthesia. Midgley.	Extracting and Anaesthesia. Wolfe.	Extracting and Anaesthesia. Herder.	Extracting and Anaesthesia. Norwood.	Extracting and Anaesthesia. Farrington.	

¹ In sections.

TABULAR VIEW—1914-15

SECOND YEAR—Second Half-Year

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
9	Clin. Chem. H. C. Smith. Com. Feb. 15. 8.30.	Mat. Medica L. O'Connell H.M.S. E-221.	Crown and Bridge Work. Clin. Lect. Cooke. H.M.S. A-201. Clin. Chem. H. C. Smith. Com. Feb. 17. 8.30.	Dent.Path.,L. Brackett. H.M.S. E-221.	Op. Dent., L. Dill. H.M.S. E-221.	Prosthetic Dentistry, L. Beckford. H.M.S. E-221.
10	Pract. Oper. Dentistry. Wyman. Stevens. Jewett. Emerson.	Pract. Oper. Dentistry. Wood. O'Connell. Burnham. Slack. Emerson.	¹ Pract. Oper. Dentistry. Freeman. Tishler. Emerson. ² Pract. Pros. Dentistry. Shannon. Giblin, Jr. Kazanjian.	Pract. Oper. Dentistry. Mackintosh. Quinby. Carter. Emerson.	Pract. Oper. Dentistry. F. T. Taylor. Safford. McPherson. McGourty. Emerson.	¹ Pract. Oper. Dentistry. White. Perrin. ² Pros. Lab. Dort. Extracting and Anaesthesia Ring.
to						
1						
2	Pract. Pros. Dentistry. Travis. Eldred. Gahn. Hurley. Beckford.	Pract. Pros. Dentistry. Eames. Loomer. Russell. Lord. Beckford.	Pract. Pros. Dentistry. Morgan. Strangman. Sullivan. Beckford.	Pract. Pros. Dentistry. Malmstrom. Gilman. Storz. Beckford.	Pract. Pros. Dentistry. Wodell. Pease. Gove. Beckford.	
to	Extracting and Anaesthesia. Midgley.	Extracting and Anaesthesia. Wolfe.	Extracting and Anaesthesia. Herder.	Porcelain Work. Hadley. Warner.	Extracting and Anaesthesia. Farrington.	
5				Extracting and Anaesthesia. Norwood.		

¹ Section B, February and April; Section A, March and May.² Section A, February and April; Section B, March and May.

TABULAR VIEW—1914-15

THIRD YEAR—October and November

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
9	Op. Dent. L. Dill. Midgley. H.M.S. A-201.	Surgery, L. Monks. H.M.S. A-201.	Crown and Bridge, L. Cooke. H.M.S. A.-201 Com. Nov. 4.	Prosthetic. Dent. L. Kazanjian. H.M.S. A-201. or Conferences H. D. S.	Syphilis, L. C. M. Smith. H.M.S. A-201. Mat. Medica. and Ther. L. Briggs. H.M.S. A-201. Com. Oct. 9.	Orthodontia L. E. H. Smith. H.M.S. A-201. or Clinical Conference H.D.S.
10 to 1	Prosthetic Dentistry. Lab. Langley. McCullagh. Myerson. Kazanjian.	¹ Oral Surgery. Clinic. Monks. Miner. Taft. ¹ Prosthetic Dentistry. Lab. Weston. Provan. Sykora. Russell. Kazanjian.	Crown and Bridge Work. Clinic. Cooke. J. F. Hove- stadt. Ruelberg. Andrews. F. W. Hove- stadt. Peters. M. Tishler. Pros. Dent. Lab. Shaunon. Kazanjian.	¹ Porcelain Work. Clinic. Hadley. Nesbett. Oldham. ¹ Prosthetic Dentistry. Lab. Hayden. Flagg. Kazanjian.	Prosthetic Dentistry. Clark. Gould. Calder. Tashjian. Kazanjian.	Orthodontia Clinic. E. H. Smith. Baker. Howe. W.C. Miner. Fernald. Extracting and Anaesthesia Ring.
2 4 to 5	Pract. Op. Dentistry. Blaisdell. Timlin. Thoma. Emerson. Extracting and Anaesthesia. Midgley.	Pract. Op. Dentistry. Paul. Spinney. W. A. Davis. Provan. Emerson. Extracting and Anaesthesia. Wolfe. Orthodontia. Baker. Howe. W. C. Miner. Fernald.	Pract. Op. Dentistry. Pike. Stone. Catheron. Emerson. Clin. Pyorrhoea. Stanley. Extracting and Anaesthesia. Herder.	Pract. Op. Dentistry. Furfey. Leavitt. Whitchurch. Jameson. Emerson. Extracting and Anaesthesia. Norwood. Orthodontia Baker. Howe. W. C. Miner. Fernald.	Pract. Op. Dentistry. Elliott. Lawton. Vaughan. Mallett. Emerson. Extracting and Anaesthesia. Farrington.	

¹ In sections.

TABULAR VIEW—1914-15

THIRD YEAR—December—January

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
9	Op. Dent. L. Midgley. Jameson. H.M.S. A-201.	Surgery, L. Monks. H.M.S. A-201.		Prosthetic Dent. L. Kazanjian. H.M.S. A-201. or Conferences H. D. S.		Orthodontia L. E. H. Smith. H.M.S. A-201. or Clinical Conference H.D.S.
10 to 1	Prosthetic Dentistry. Lab. Langley. McCullagh. Myerson. Kazanjian.	¹ Oral Surgery. Clinic. Monks. Miner. Taft. ¹ Prosthetic Dentistry. Lab. Weston. Provan. Sykora. Russell. Kazanjian.	Crown and Bridge Work. Clinic. Cooke. J. F. Hove- stadt. Peters. Andrews. Ruelberg. F. W. Hove- stadt. M. Tishler. Pros. Dent. Lab. Shannon. Kazanjian.	¹ Porcelain Work. Clinic. Hadley. Nesbett. Oldham. ¹ Prosthetic Dentistry Lab. Hayden. Flagg. Kazanjian.	Prosthetic Dentistry. Clark. Gould. Calder. Tashjian. Kazanjian.	Operative Dentistry. E. H. Smith. Crowley. Estes. Emerson. Extracting and Anaesthesia Ring.
2	Pract. Op. Dentistry. Blaisdell. Chase. Timlin. Thoma. Emerson. Extracting and Anaesthesia. Midgley.	Pract. Op. Dentistry. Paul. W. A. Davis. Spinney. Provan. Emerson. Extracting and Anaesthesia. Wolfe.	Pract. Op. Dentistry. Pike. Catheron. Stone. Emerson. Clin. ¹ Pyorrhoea. Stanley. Extracting and Anaesthesia. Herder.	Pract. Op. Dentistry. Furfey. Leavitt. Whitchurch. Jameson. Emerson. Extracting and Anaesthesia. Norwood.	Pract. Op. Dentistry. Elliott. Lawton. Vaughan. Mallett. Emerson. Extracting and Anaesthesia. Farrington.	
4 to 5		Orthodontia. Baker. Howe. W. C. Miner. Fernald.			Orthodontia. Baker. Howe. W. C. Miner. Fernald.	

¹ In sections.

TABULAR VIEW—1914-15

THIRD YEAR—February—June

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
9	Op. Dent. L. Jameson. Midgley. Wright. H.M.S. A-201.	Surgery, L. Monks. H.M.S. A-201.	Crown and Bridge Work. Clin. Lect. Cooke. H.M.S. A-201.	Prosthetic Dent. L. Kazanjian. H.M.S. A-201. or Conferences H.D.S.	Neurology. E. W. Taylor. 4 lectures. H.M.S. A-201 Roentgenology. E. C. Cummings. 6 lectures. Com. Mar. 5.	Orthodontia L. E.H. Smith. H.M.S. A-201. or Clinical Conference H.D.S.
10 to 1	Prosthetic Dentistry. Lab. Langley. McCullagh. Myerson. Kazanjian.	¹ Oral Surgery Clinic. Monks. Miner. Taft. ¹ Prosthetic Dentistry. Lab. Weston. Provan. Sykora. Russell. Kazanjian.	Crown and Bridge Work. Clinic. Cooke. J. F. Hove-stadt. Ruelberg. Andrews. M. Tishler. Peters. F. W. Hove-stadt. ¹ Pros. Dent. Lab. Shannon. Kazanjian.	¹ Porcelain Work. Clinic. Hadley. Nesbett. Oldham. ¹ Prosthetic Dentistry Lab. Hayden. Flagg. Kazanjian.	Prosthetic Dentistry. Clark. Gould. Calder. Tashjian. Kazanjian.	Operative Dentistry. E.H. Smith. Crowley. Estes. Emerson. Extracting and Anaesthesia Ring.
2	Pract. Op. Dentistry. Blaisdell. Chase. Timlin. Thoma. Emerson. Extracting and Anaesthesia. Midgley.	Pract. Op. Dentistry. Paul. Spinney. W. A. Davis. Provan. Emerson. Extracting and Anaesthesia. Wolfe.	Pract. Op. Dentistry. Pike. Catheron. Stone. Emerson. Clin. ¹ Pyorrhoea. Stanley. Extracting and Anaesthesia. Herder.	Pract. Op. Dentistry. Furfey. Leavitt. Whitchurch. Jameson. Emerson. Extracting and Anaesthesia. Norwood.	Pract. Op. Dentistry. Elliott. Lawton. Vaughan. Mallett. Emerson. Extracting and Anaesthesia Farrington.	
4 to 5		Orthodontia. Baker. Howe. W. C. Miner. Fernald.			Orthodontia Baker. Howe. W. C. Miner. Fernald.	

¹ In sections.

STUDENTS

THIRD YEAR

NAME	HOME RESIDENCE	PRESENT ADDRESS
Ahern, Joseph Arthur,	<i>Jamaica Plain,</i>	101 Day St., Jam. Pl.
Allen, Charles Ellis,	<i>Burlington, Vt.</i>	68 St. Stephen St., Boston
Bates, Frederick Floron,	<i>Allston,</i>	21 Bradbury St., Allston
Blaisdell, George Brickett,	<i>Pittsfield,</i>	68 St. Stephen St., Boston
Blumenthal, Fred Ralph,	<i>Dorchester,</i>	1374 Dorchester Ave., Dor.
Briggs, Cyrus King,	<i>Portland, Me.</i>	37 Perry St., B'kline
Brigham, Ferdinand, A.B. (<i>Tufts Coll.</i>) 1912,		[ingham So. Framingham, 5 Everit Ave., So. Fram-
Brody, Louis Nathaniel,	<i>Dorchester,</i>	7 Oakley St., Dor.
Cavanagh, Arthur Leo,	<i>Somerville,</i>	17 Dimick St., Somer.
Chambers, Walter Harlow,	<i>Somerville,</i>	19 Perry St., Somer.
Church, Carroll Lindley,	<i>Gardiner, Me.</i>	61 Columbus Ave., Somer.
Clancy, William James,	<i>Milford,</i>	145 West St., Milford
Cohen, Zelman,	<i>Somerville,</i>	103 Sycamore St., Somerville
Coleran, John Edward,	<i>Dorchester,</i>	100 Hamilton St., Dor.
Comeau, George Edmund, A.B. (<i>St. Ann's Coll.</i>) 1907,	<i>Lower Saulnierville, N.S.</i>	329 Hanover St., Boston
Curtis, Ralph Corydon,	<i>W. Lynn,</i>	57 South St., W. Lynn
Cushman, Frank Holmes, S.B. (<i>Dartmouth Coll.</i>) 1913,	<i>Claremont, N. H.</i>	246 Newbury St., Boston
Cutler, Harold James, A.B. (<i>Clark Coll.</i>) 1910,	<i>Edmonton, Alta., Canada,</i>	60 Westland Ave.,
Dillon, John Fletcher,	<i>Dorchester,</i>	18 Paisley P'k, Dor.
Durant, Francis Chester,	<i>Cambridge,</i>	9 Norton Pl., Cambridge
Garfinkle, Samuel William,	<i>Hartford, Conn.</i>	187 St. Botolph St., Boston
Genensky, Jacob,	<i>New Bedford,</i>	69 Russell St., New Bedford
Gilgoff, Louis,	<i>Malden,</i>	51 Newton St., Malden
Good, Roy Frederick,	<i>Monticello, Me.</i>	1 Durham St., Boston
Helfanbein, Jacob,	<i>Fall River,</i>	190 W. Brookline St., Boston
Holmes, Oswald William,	<i>Winthrop,</i>	4 Revere St., Winthrop
Jaffar, John Hassan,	<i>Urmia, Persia,</i>	449 Mass. Ave., Boston
Johnson, Frank Burt,	<i>Pawtucket, R. I.</i>	449 Mass. Ave., Boston
Johnston, Claude Victor,	<i>Kingston, N. Y.</i>	68 St. Stephen St., Boston
Keller, William Columbus,	<i>Astoria, L.I., N.Y.</i>	68 St. Stephen St., Boston
King, Charles Henry,	<i>Bangor, Me.</i>	61 Columbus Ave., Somer.
Konjoyian, Dickran Mugerlich,	<i>Worcester,</i>	25 Ormond St., Worcester
Kupperstein, Herman William,	<i>Hartford, Conn.</i>	4 Calumet St., Rox.
Kupperstein, Joseph,	<i>Hartford, Conn.</i>	4 Calumet St., Rox.

Lawry, Arthur Albert,	<i>Portland, Me.</i>	706 Huntington Ave., Boston
Leslie, Frank Herbert,	<i>Brockton,</i>	20 Bickerstaff St., Boston
Lewis, Chauncey Nye,	<i>E. Boston,</i>	153 Princeton St., E. Boston
McCarty, Simon DeSalles,	<i>Dorchester,</i>	24 Arcadia St., Dor.
Mahoney, Edward Aloysius,	<i>Newtonville,</i>	511 Watertown St., Newtonville
Mendelsohn, Gabriel Melvin,	<i>Roxbury,</i>	85 Brunswick St., Rox.
Oetiker, Gustave,	<i>Lachen, Switzerland,</i>	96 St. Botolph St., Boston
Reed, James Howard,	<i>New York,</i>	15 Grays Hall, Cambridge
Rihan, Habîb Yûsuf, A.B. (<i>Syrian</i> <i>Protestant Coll.</i>) 1909,		[Boston <i>Deir-el-Kamer, Syria,</i> 706 Huntington Ave.,
Sawyer, Charles Berry,	<i>Lynn,</i>	128 Franklin St., Lynn
Selby, Samuel Vaughan, L.D.S. (<i>England</i>) 1912,	<i>Sidney, Australia,</i>	641 Huntington Ave., Boston
Shapiro, Maurice,	<i>Roxbury,</i>	102 Devon St., Rox.
Sharfman, Samuel Saul,	<i>Hartford, Conn.</i>	316 Huntington Ave., Boston
Smith, Charles Joseph,	<i>Taunton,</i>	33½ Oak St., Taunton
Smyth, George Cleland,	<i>Providence, R. I.</i>	702 E. 6th St., So. Boston
Stevens, Roy Brackett,	<i>Waltham,</i>	Crescent P'k, Waltham
Terra, Francis Joseph,	<i>Cambridge,</i>	105 Second St., Cambridge
Tewksbury, Lewis Garland,	<i>Camden, Me.</i>	404 Centre St., Jam. Pl.
Treadwell, Elmer Russell,	<i>Lynn,</i>	102 Grove St., Lynn
Vercueil, Jan Frederik,	<i>Middleburg, Transvaal, So. Africa,</i>	706 Huntington Ave., Boston
Wallace, Ellmore Loftis,	<i>Brockton,</i>	37 W. Elm St., Brockton
Watson, Raymond Henry,	<i>Waltham,</i>	56 Robbins St., Waltham
Yavner, Max,	<i>Somerville,</i>	152 Linwood St., Somer.

SECOND YEAR

Adams, Hyg,	<i>Revere,</i>	111 Thornton St., Revere
Akerstrom, Sidney Malcolm, A.B. (<i>Dartmouth Coll.</i>) 1913,	<i>Roxbury,</i>	1 Highland Pl., Rox.
Ansel, Samuel Edward,	<i>Chelsea,</i>	150 Addison St., Chelsea
Baker, Douglas Morgan,	<i>Beverly,</i>	30 Abbott St., Beverly
Barrett, Claude Vincent,	<i>Milo, Me.</i>	134 St. Botolph St., Boston
Bell, James,	<i>Lawrence,</i>	24 Hobson St., Lawrence
Boland, John Edward,	<i>Northampton,</i>	187 St. Botolph St., Boston
Brouillette, Lawrence Archibald,	<i>White River Junction, Vt.</i>	449 Mass. Ave., Boston
Buehler, Arthur George,	<i>New York, N. Y.</i>	706 Huntington Ave., Boston
Buehler, Harold Howard,	<i>New York, N. Y.</i>	706 Huntington Ave., Boston
Burke, Daniel Henry, Jr.	<i>Rockland,</i>	164 Myrtle St., Rockland

- Burke, Frank Thomas,
 Card, Lewis Osgood,
 Carroll, Charles Russell,
 Clifford, Joseph,
 Connelly, William Augustine,
 Dempsey, Thomas Francis,
 Dorney, William Andrew,
 Fenton, Michael Thomas,
 Feuerhan, Frank August,
 Fleming, Joseph Paul, Jr.
 Forbush, Charles Arthur,
 Freed, Hymen,
 Fuller, Wilfred Joy,
 Furfey, Frederick Francis,
 Galloway, Frank Herbert,
 Gatchell, Raymond Walker,
 Goldberg, Philip,
 Goldinger, Benjamin,
 Goldinger, Harry,
 Goldman, Samuel,
 Goldsmith, Julius Benjamin,
 Gray, Homer Robinson,
 Gullifer, William Harry,
 Ham, Everett Clayton,
 Haynes, Melville Winslow,
 Held, Arthur Adolf Paul,
 Hodgkins, Ray King,
 Larkin, Richard James,
 MacInnis, Philip Hutchinson,
 McIntire, Wheeler Wendell,
 McKenna, Augustus Anthony,
 Morrissey, Edward Patrick Henry,
 O'Neil, Owen Roe,
 Peacock, Harold Lee,
 Pierce, Frederick Gunner,
 Pofcher, Jacob,
 Powers, Fred Seavey,
 Prentice, Wentworth Baldwin,
 Sandiford, Chester Leigh,
 Seidenberg, Jacob,
 Severy, Clarence Geddes,
- Brockton*, 416 No. Montello St., Brockton
Somerville, 243 Pearl St., Somer.
Worcester, 32 Francis St., Rox.
Dorchester, 6 Davitt St., Dor.
Reading, 15 Minot St., Reading
Newton, 449 Washington St., Newton
Newtonville, 21 Claflin Pl., Newtonville
Hartford, Conn. 189 Heath St., Rox.
Portsmouth, N. H. 86 Wheatland Ave., Dor.
Roxbury, 66 Centre St., Rox.
Boston, 31 Astor St., Boston
Cambridge, 40 Market St., Cambridge
Somerville, 54A College Ave., Somer.
Brookline, 111 Stedman St., B'kline
Lawrence, 90 Butler St., Lawrence
Pawtucket, R. I. 449 Mass. Ave., Boston
E. Boston, 112 Marion St., E. Boston
E. Boston, 430 Meridian St., E. Boston
E. Boston, 430 Meridian St., E. Boston
Boston, 1 Allen St., Boston
New York, N. Y. 80 Harold St., Boston
Uxbridge, 99 So. Main St., Uxbridge
Belmont, 125 Pine St., Belmont
Somerville, 31 Heath St., Somer.
Dorchester, 76 Parkman St., Dor.
Leipsic, Germany, 656 Huntington Ave., Boston
Bar Harbor, Me. 134 St. Botolph St., Boston
Wollaston, 929 Hancock St., Wollaston
Malden, 39 Mills St., Malden
Newton Upper Falls,
 9 Carter St., Newton Upper Falls
Fall River, 8 Park View R'd, Jam. Pl.
So. Boston, 9 Liberty St., So. Boston
Belfast, So. Africa, 706 Huntington Ave., Boston
Somerville, 10 Franklin St., Somer.
W. Acton, W. Acton
Roxbury, 40 Devon St., Rox.
Deer Isle, Me. 12 Tudor St., Chelsea
Norwich, Conn. 25 College House, Cambridge
Belmont, 9 Goden St., Belmont
Chelsea, 179 Walnut St., Chelsea
Boston, 108 Huntington Ave., Boston

Sherburne, William Haven,	Woburn,	8 Page Pl., Woburn
Sissenwine, William,	Dorchester,	151 Holmes Ave., Dor.
Sly, Walter James,	Waltham,	142 Lowell St., Waltham
Smith, Byron Nelson Harris,	Lakewood, R. I.	126 St. Botolph St., Boston
Smith, Harold William,	Dorchester,	24 Thane St., Dor.
Sowles, Homer Charles,	Barre, Vt.	60 Westland Ave., Boston
Stevens, Benjamin Strout,	Brockton,	316 Huntington Ave., Boston
Stevens, Farnum Charles,	Derry, N. H.	519 Mass. Ave., Boston
Stover, Harold Lincoln,	Amesbury,	31 Holyoke St., Cambridge
Strange, Clifford,	Portland, Me.	1 Durham St., Boston
Summerfield, Max Harold;	Roxbury,	80 Harold St., Rox.
Thompson, William Ransom,	Lowell,	68 Grove St., Lowell
Tierney, Maurice John, Jr.	Dorchester,	44 Pearl St., Dor.
Walsh, Charles Bartholomew,	Allerton,	35 K St., Allerton
Wheeler, Clifton Freeman,	Watertown,	118 Summer St., Watertown
White, Lawrence Starrett,	Wollaston,	129 Winthrop Ave., Wollaston
Williams, Charles Rollin,	Salem,	12 Albion St., Salem

FIRST YEAR

Atwood, Clifford Herman,	Astoria, L.I., N.Y.	73 Fenwood R'd, Boston
Bartlett, Donald Stearns,	Norway, Me.	706 Huntington Ave., Boston
Baxter, Edward Wilson,	New London, Conn.	57 Windsor St., Rox.
Bennett, William Eyres,	Claremont, W. Australia,	641 Huntington Ave., Boston
Blanchard, Lloyd Henry,	Uxbridge,	10 Auburn Pl., B'kline
Blumberg, Louis Everett,	Hempstead, L. I., N. Y.	123 Lawrence St., Brockton
Bolan, Edmund Joseph,	Haverhill,	141 Hilldale Ave., Haverhill
Bradway, Earl Leslie,	So. Framingham,	9 Alexander St., So. Framingham
Breslow, William,	Everett,	89 Beach St., Everett
Briggs, Leon Royden,	Providence, R. I.	129 Waverly St., Providence, R. I.
Brodeur, Paul Adrian,	Somerville,	29 Robinson St., Somer.
Brody, Herman,	Ansonia, Conn.	51 Pembroke St., Boston
Carnes, Harold Arthur,	Reading,	199 Lowell St., Reading
Cowen, Lewis Augustus,	Lynn,	60 Rogers Ave., Lynn
Devlin, Francis Paul,	Brighton,	39 Surrey St., Brighton
Dow, Edmund Charles,	Allston,	18 Harvard Ave., Allston
Dowd, Charles Stuart,	W. Springfield,	37 Cogswell Ave., Cambridge
Eisenberg, Moses Joel,	Roxbury,	12 School St., Rox.
Ernlund, Carl Helge, A.B. (College of Lund, Sweden) 1911,	Brunsta, Sweden,	144 Pearl St., Cambridge

- Esterberg, Herbert Ludwig,
 Ferris, Oliver Morgan,
 Fine, Samuel,
 Finn, Joseph Thomas,
 Flaschner, Abraham Mark,
 Fletcher, Roland Ezra,
 Fortin, Charles Percival,
 Goldberg, Samuel,
 Grover, Selig Isaac,
 Hammond, Orvar Jordan.
 Hyde, Lanson James,
 Irving, Rupert Inglis,
 Johnson, Philip Ignatius,
 Kenefick, William James,
 Kimball, Harvey Elliott,
 Krupp, Philip,
 Kunker, Frank Earl,
 Kyle, Thomas Joseph,
 LaFayette, Harold Francis,
 LaFlamme, Arthur James,
 Libby, Raymond Wells,
 Macdonald, Harold Kenny,
 MacIver, Alistair Ian,
 Midwood, Louis Calvin,
 Miller, Sigmund,
 Murphy, Albert Bernard,
 Nason, Carleton,
 Nathan, Leonard Daniel,
 Perry, Warren Buell,
 Phillips, Russell Samuel,
 Prout, Harold Basil,
 Ratner, Benjamin Robert,
 Reiser, Frank Arno,
 Sagoff, Abraham,
 Selib, Mitchell Samuel,
 Sharpe, Max,
 Smith, Clifton Arthur Hornbrook,
 Smith, Richard Burton,
 Sproat, Fred Franklin,
 Sterling, Harry,
- Reading,* 20 Walnut St., Reading
Hingham Centre, School St., Hingham Centre
Fitchburg, 18 Boutelle St., Fitchburg
Dedham, 17 School St., Dedham
E. Boston, 326 Chelsea St., E. Boston
Madison, Me. 1 Durham St., Boston
New Bedford, 706 Huntington Ave., Boston
Roxbury, 54 Lawrence Ave., Rox.
Boston, 84 W. Cedar St., Boston
Somersworth, N. H. 124 Chandler St., Boston
Colebrook, N. H. 60 Westland Ave., Boston
Moncton, N. B. 113 St. Botolph St., Boston
Brookline, 181 Davis Ave., B'kline
Allston, 9 Bradbury St., Allston
E. Boston, 62 Falcon St., E. Boston
Roxbury, 42 Munroe St., Rox.
Albany, N.Y. 2 Wigglesworth St., Boston
Andover, Elm St., Andover
Watertown, 144 Dexter Ave., Watertown
Belmont, 397 Belmont St., Belmont
Rochester, N. H. 316 Huntington Ave., Boston
Everett, 29 Locust St., Everett
Newport, R. I. 73 Fenwood R'd, Rox.
Providence, R. I. 73 Fenwood R'd, Rox.
Salem, 28 Norman St., Salem
Waltham, 47 Fiske St., Waltham
Great Barrington, 12 Heath St., Winter Hill
Perth, W. Australia,
 641 Huntington Ave., Boston
Portland, Me. 706 Huntington Ave., Boston
Brookline, 57 Perry St., B'kline
E. Hampden, Me.
 1387 Commonwealth Ave., Allston
Chelsea, 26 Carter St., Chelsea
Rockville, Conn. 8 Batavia St., Boston
Dorchester, 17 Lawrence P'k, Dor.
Roxbury, 14 So. Huntington Ave., Rox.
Boston, 13 Phillips St., Boston
Montpelier, Vt. 31 Leyland St., Dor.
Dorchester, 47 Dracut St., Dor.
Manchester, N. H. 168 Brookline Ave., B'kline
Boston, 1 Eaton St., Boston

Sturtevant, Herbert Alvan,	<i>Cambridge,</i>	60 Roseland St., Cambridge
Sugarman, George Bernard,	<i>Ellington, Conn.</i>	53 Fayston St., Rox.
Talcoff, William Jacob,	<i>Boston,</i>	50 Salem St., Boston
Veia, Pedro Severiano, A.B. (<i>Nacional College, Asunción, Paraguay</i>) 1911,	<i>Asunción, Paraguay,</i>	185 Brighton Ave., Allston
Vercueil, Alphonso Minnaar,	<i>Middleburg, Transvaal, So. Africa,</i>	706 Huntington Ave., Boston

SPECIAL STUDENTS

Bonin, Cleophas Paul,	<i>No. Grosverdale, Conn.</i>	68 St. Stephen St., Boston
Osgood, Herman Ashton,	<i>Roxbury,</i>	240 Humboldt Ave., Rox.
Spring, Henry Powell,	<i>Dresden, Germany,</i>	640 Huntington Ave., Boston

UNCLASSIFIED STUDENTS

May, Francis Andrew, A.B. (<i>Holy Cross Coll.</i>) 1910,	<i>Maynard,</i>	77 Summer St., Maynard
Murphy, John Joseph,	<i>Lawrence,</i>	37 Milton St., Lawrence

SUMMARY

THIRD-YEAR STUDENTS	57
SECOND-YEAR STUDENTS	69
FIRST-YEAR STUDENTS	64
SPECIAL STUDENTS	3
UNCLASSIFIED STUDENTS	2
TOTAL	195

LIST OF GRADUATES

1911

Frederick Hooke Bridgham,
 Charles Sumner Emerson, Jr.,
 Byron Hinson Haley, *cum laude*,
 Herman Everett Hichborn,
 Albert Charles Holzman,
 Frederick Dean McIntyre,
 Charles Franklin Ross,
 Charles Frederick Sprague,
 Samuel Warren Stoddard,
 Leon Axtelle Storz,
 Kurt Hermann Thoma, *cum laude*,
 Bernard Walper,

Mansfield, Wash.
 Dorchester.
 Newport, R. I.
 Boston.
 Boston.
 Danvers.
 Lebanon, N. H.
 Boston.
 Boston.
 Worcester.
 Boston.
 Roxbury.

1912

Earl Alexander Anderson,
 William Wilton Anthony,
 David Francis Burke,
 Thomas Francis Cloney, Jr.
 Ivan Rogers Cottrell,
 Joseph Benjamin Finberg,
 Aaron Hyman Nathan Flink,
 Nathan Solomon Friedberg,
 Adolph Gahm,
 Vincent Aloysius Gookin,
 Francis Thomas Hassett,
 Elias Hirshon,
 Joseph Horgan,
 Frederick Waldemar Hovestadt,
 William Gleason Jewett,
 Victor Paul Klapacs,
 Cedric Tremaine Lynes,
 Lawrence Edward McGourty,
 Paul Robert Manning,
 Everett Leo Noonan,
 John Clarence Normand,
 Joseph Sylvester O'Connor,
 Herbert Carroll Ober,
 Julius Simon Pos,
 Arthur Hodgkins Reed,
 Francis Porter Riggs,

Portland, Me.
 Boston.
 Cambridge.
 New York, N. Y.
 New York, N. Y.
 Haverhill.
 Roxbury.
 Boston.
 Brighton.
 Dorchester.
 Great Barrington.
 Boston.
 Cambridge.
 Boston.
 Gardner.
 So. Boston.
 Winchester.
 Malden.
 Holyoke.
 Cambridge.
 Boston.
 Worcester.
 Cambridge.
 New York.
 Boston.
 New York.

Henry James Skinner,	Dorchester.
Samuel Small,	Boston.
Nishan Der Sarkis Tashjian,	Boston.
Harold Freeman Tufts, A.B. (<i>Acadia Coll.</i>) 1900,	Boston.
Everett Thomas Waters,	New York, N. Y.
Frederick Emory Wellington,	Fitchburg.
Meyer Winer,	Salem.
Chester Fisher Wolfe,	Norwood.
Nicholas Edward Young,	Haverhill.

1913

Harold Wales Alden,	Northampton.
Samuel Berry,	Boston.
David David Bloom,	Boston.
Percy Tylor Burt,	Brockton.
Berj Quarekin Chutjian,	Boston.
Abraham Kaganovsky Cohen,	Minneapolis, Minn.
Jacob William Cushner,	Boston.
Joel Emanuel Davidson,	Dorchester.
Hachadoor Sarkis Emirzian,	Providence, R. I.
Merton Weston Foss,	Brockton
Thomas James Giblin, Jr.,	Dorchester.
Ralph Edward Gove,	Boston.
Edward Martin Guthrie,	Malden.
Raymond Burns Hanrahan,	Boston.
Stuart Roberts Hayman,	Boston.
Harold Clement Hoye,	Belmont.
Charles Alexander Judd,	Danbury, Conn.
David Gyorgy Klein,	Dorchester.
Louis Kovalsky,	Fall River.
William Stocks Lacey, L.D.S. (<i>England</i>) 1908,	
M.R.C.S., L.R.C.P. (<i>England</i>) 1912,	Hertford, Herts, England.
George Holland Lappen,	Dorchester.
Julius Henry Levine,	Roxbury.
Ernest Lapham Lockwood,	Providence, R. I.
Allan Witham Lord,	Danvers.
Ansel Mayo Lothrop,	Belfast, Maine.
Sterling Nye Loveland,	Newton.
Thomas Stephenson MacKnight,	New York.
Thomas Edward McGreen,	Providence, R. I.
William Henry Maguire,	Walpole.
Stephen Parker Mallett,	Boston.

Jean Achille Morin,
 George Frederick Marsh, Jr.,
 Horatio Cook Meriam, A.B. 1911,
 Harry Yeates Nutter,
 Harrison Lindsay Parker,
 Charles William Rawlins,
 Charles Weston Ringer,
 Joseph Henry Selib,
 John Mark Smith,
 Henry Francis Stevenson,
 Lee Forney Strickler,
 Roy Greenwood Strickler,
 Frederick Charles Thomson,
 Philip Edgar Tukey,
 Raymond Lesley Webster,
 Morton Fenton Yates,

Paris, France
 Boston.
 Salem.
 Winchester.
 Winchester.
 Roxbury.
 Allston.
 Boston.
 Chelsea.
 Bynum, N. C.
 Paterson, N. J.
 Paterson, N. J.
 Cambridge.
 Portland, Me.
 Providence, R. I.
 So. Framingham.

1914

George Nathan Abbott,
 Abraham Altshuler,
 Walter Irving Ashland,
 Benjamin Edward Bahn,
 David Samuel Bedrick,
 Tullio Nicola Bello,
 Max Besas,
 Knut Erhard Boldt-Christmas, A.B. (*Linköping*,
Sweden) 1910,
 Edward Vincent Bowler,
 Frederick James Caldwell,
 Victor Thomas Augustine Curtin,
 Basil Constantine Despotes,
 Pierre Stevens de Belfort Didsbury,
 Ralph Howard Drury,
 Ralph Burleigh Edson,
 Norman Ellard,
 Edward Finn,
 Harry Fishman,
 Harold Irving Fiske,
 Cecil Gray Fletcher,
 Fred Strong Frary,
 David Dangel Freedman,
 John Henry Garvin, Jr.,

Rockland.
 Boston.
 Boston.
 Dorchester.
 Fall River.
 Boston.
 New York, N. Y.
 Halmstadt, Sweden.
 Waltham.
 Dorchester.
 Lawrence.
 Boston.
 Paris, France.
 Manchester, N. H.
 Springfield.
 Allston.
 Boston.
 Cambridge.
 Upton.
 New York, N. Y.
 New Haven, Conn.
 Boston.
 Lawrence.

Charles William Goetz,	Roxbury.
Isaac Goldberg,	Boston.
Bernard Leo Higgins,	Boston.
Harry Leo Kilburn,	Fredericton, N. B.
Moses Hyman Lurie,	Dorchester.
Judson Stewart McGregor, S.B. (<i>Acadia Coll.</i>)	
1908,	Boston.
Harry Francis McKanna,	Crompton, R. I.
George Edward Mahoney,	Lowell.
Harold Woodbury George Marshall,	Athol.
Thomas William Murray,	Portland, Me.
John Andrew Nash,	Dorchester.
Will Carleton Niles,	Watertown.
Daniel Joseph O'Mara,	Boston.
Ivan Wallace Pasmore, L.D.S., R.C.S. (<i>England</i>)	
1912,	Exeter, England.
George Porter Pendleton,	Natick.
Charles Walter Proud,	Everett.
Bene Rippen,	Leyden, Holland.
Abraham George Roitman,	E. Boston.
Max Schneider, L.D.S., R.C.S. (<i>England</i>) 1912,	Gorlitz, Germany.
Stuart Hamilton Vaughan,	Melrose.
Walter Elton Wade,	Brookline.
Thomas Alexander Moffatt Wilson,	Perth, W. Australia.
Walter Edward Young,	Newtonville.

ANNOUNCEMENT FOR 1915-16

The next session of the Dental School begins September 27, 1915. All students are required to register at the Dean's office on this day. Students desiring to enter the Harvard Dental School in the first-year class, or with advanced standing, should write prior to this time to the Dean of the Harvard Dental School, in regard to conditions for admission.

CALENDAR

1915.

- Sept. 15, Wednesday.* Examinations begin for applicants for advanced standing, and for men previously conditioned.
- Sept. 27, Monday.* **Academic Year begins.** Registration of Students. Payment of the first instalment of the tuition-fee is required on or before this date.
- Oct. 12, Tuesday.* Columbus Day : a holiday.
- Nov. 25, Thursday.* Thanksgiving Day : a holiday.
- Dec. 31, Friday.* Last day for receiving dissertations for the Boylston Medical Prizes.

RECESS FROM DEC. 23, 1915, TO JAN. 2, 1916, INCLUSIVE

1916.

- Jan. 15, Saturday.* Last day for receiving applications from students in the Professional Schools to be qualified for the degrees of Ph.D. and A.M. in 1916.
- Jan. 26, Wednesday.* Mid-year Examinations begin.
- Jan. 29, Saturday.* Payment of the second instalment of the tuition-fee is required on or before this date.
- Feb. 1, Tuesday.* **Second half-year begins.**
- Feb. 22, Tuesday.* Washington's Birthday : a holiday.

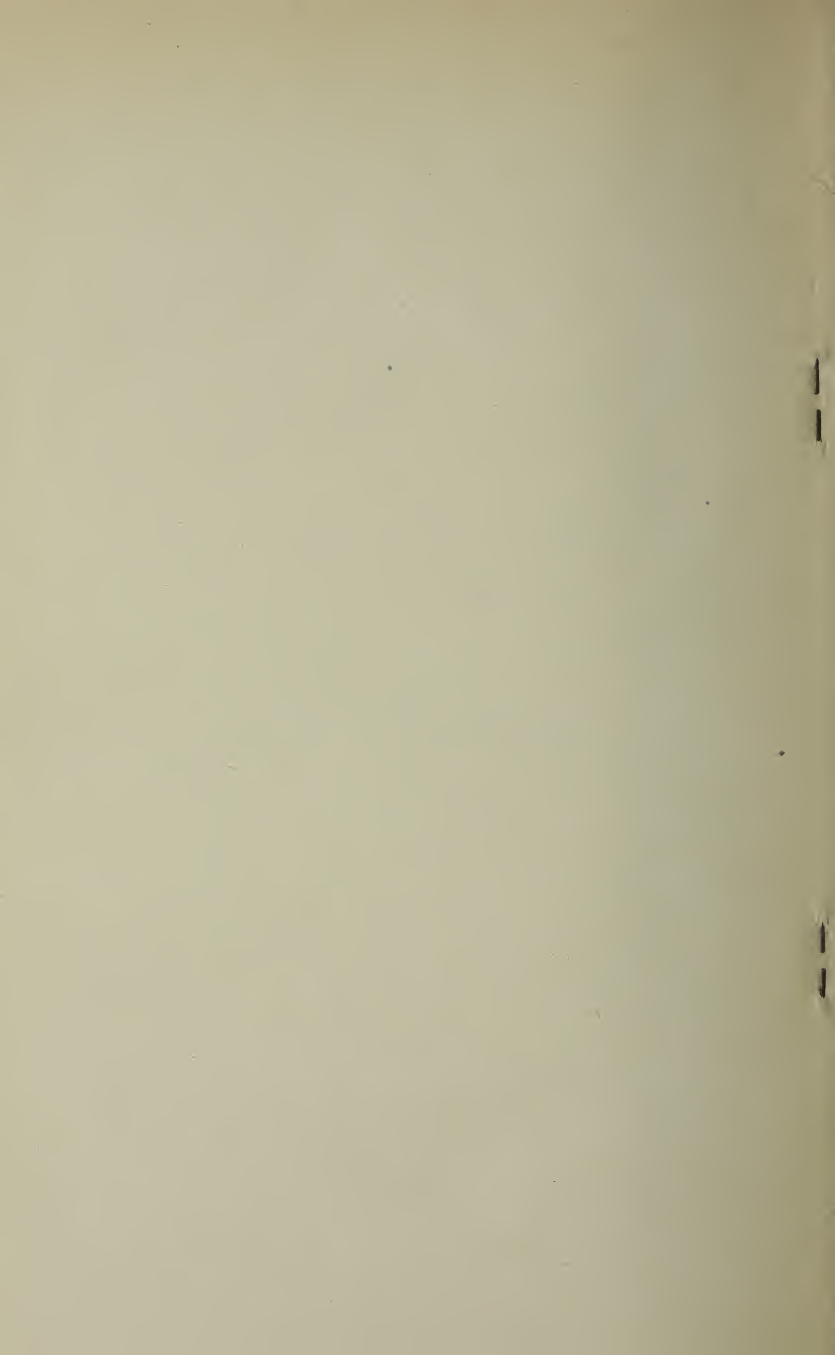
RECESS FROM APRIL 16 TO APRIL 22, INCLUSIVE

- May 1, Monday.* Last day for receiving applications of candidates for the degree of D.M.D. in 1916.

- May 30, Tuesday.* Memorial Day : a holiday.
June 1, Thursday. Examinations begin.
June 12-17, Mon., to Sat. Examinations for admission.
June 19, Monday. Alumni Day.
June 22, Thursday. **Commencement.**

SUMMER VACATION, FROM COMMENCEMENT TO SEPTEMBER 24, INCLUSIVE

- Sept. 13, Wednesday.* Examinations begin for applicants for advanced standing, and for men previously conditioned.
Sept. 25, Monday. **Academic Year begins.** Registration of Students. Payment of the first instalment of the tuition-fee is required on or before this date.
Oct. 12, Thursday. Columbus Day : a holiday.
Nov. 30, Thursday. Thanksgiving Day : a holiday.





3 0112 105629130

OFFICIAL REGISTER OF HARVARD UNIVERSITY

[Entered, March 6, 1913, at Boston, Mass., as second-class matter,
under Act of Congress of August 24, 1912.]

Issued at Cambridge Station, Boston, Mass., six times a year

These publications include:—

The Annual Reports of the President and of the Treasurer.

The Annual University Catalogue.

The Annual Catalogues of the College and the several Professional Schools of the University; the Descriptive Pamphlet; the Announcements of the several Departments, etc., etc